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WILLIAM TRICKER inc.

Saddle River, N.J. Independence, Ohio.

WATER LILIES, AQUATIC PLANTS and ORNAMENTAL FISHES



The Ganges Trio

Three Water Lilies in
perfect color harmony.

Frank Trelease, Red.

Caerulea, Blue.

Chromatella, Yellow.

Complete Collection, No. 205

\$4.50



ORIENTAL SPLENDOR in the MODERN WATER GARDEN



THE Sacred Lotus of unusual beauty, the richly colored, fragrant water lilies, the cool green leaves floating on the placid water—imagine having all the magnificence of an oriental water garden right in your own home grounds. Impossible? Not at all. The Ganges Trio illustrated on the front cover is just one of many interesting groups of water lilies that will bring you this splendor of the East in miniature.

Water gardens are now "The Thing" and everyone is anxious to have one. A lily pool will give your garden that distinctive touch that you have always longed for — that "something" that will make it individually your own. Why not plan to have a water garden such as the ancients enjoyed? In this book you will find everything listed that you will need — not only the colorful water lilies, but all the other plants that help to create the luxurious atmosphere of the oriental pool. Water gardening is so simple and the results so satisfying that you, too, will be enthusiastic about it.

No Weeding — No Watering — Complete Enjoyment

All the charm of being distinctive, all the joy of having rare and beautiful blooms, yet none of the hard work usually associated with plants and flowers — that's water gardening. Think of it — no tire-some weeding, no watering of ever-thirsty plants, no need of learning a lot of special gardening instructions — just the pleasure of watching new beauties unfold each day. And if you have several night-blooming water lilies your pool provides that many more delightful hours out in the garden. This book will help you plan your water garden — be it large or small, your pool will always be the most enjoyable spot in your grounds.

The magnificence of the Orient is found in this modern pool on the grounds of Mr. Hubert J. Brooks, Toronto, Canada.



PLEASE USE THIS ORDER SHEET. See inside back cover.





Water Lilies
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Egyptian Lotus
Pages 23-24



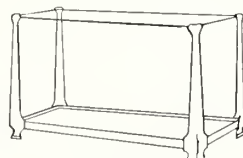
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Ornamental Fishes
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EVERYTHING for the WATER GARDEN

ONCE you get your water garden started and realize its pleasant possibilities—then you'll want to have everything for it that will make it "just so." This is easy to do when you can secure everything you will need from one organization. Below is a list of just what you will want to make yours a most charming water garden. Turn to the pages indicated and you will find an excellent choice of varieties—each thoroughly described to make selection easy.

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Shallow Water Plants
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Marsh or Bog Plants
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ORDERING INSTRUCTIONS—Terms and Policies

WE give these complete instructions to help you avoid delay and misunderstanding. In ordering, read this carefully, use the order blank enclosed, and send your order to our office nearest you—either to Independence, Ohio, or Saddle River, New Jersey.

ORDER EARLY. This is most important. There are two reasons. Those who order early are assured of better service and certain of our having on hand whatever they want. While water lilies may be planted as late as August, the supply of most varieties is limited. Too, due to the fact that so many customers want their plants in May and early June, our shipping department is over-worked at that time and cannot give as prompt service to orders sent in late. We wish to advise you to order immediately and leave it to our judgment as to the proper time to ship for planting in your locality. We sent out first those orders for hardy plants that may be set out in April or May. Next we send those orders for certain tropical lilies that should not be set out until late May or June in the northern states. Orders received after May 1 cannot be classified, and simply are shipped in rotation about three to six weeks after their receipt. Canadian customers may avoid delay, also, by enclosing with their orders the number of their permit to import plants, obtainable from the Plant Pest Board, Department of Agriculture, Canada.

SELECTION AND SUBSTITUTION. Many of our customers prefer to have us select combinations of plants for them. If you desire this service, please sketch or describe for us your pool and its surroundings so the results may be made to harmonize. Sometimes, due to an unusual demand, we are unable to supply certain varieties to all who send orders. In such cases, we substitute similar plants unless otherwise instructed.

HOW AND WHEN WE SHIP. All shipments are made by express collect unless you instruct us otherwise. Should you wish your shipment by parcel post, it will be entirely at your own risk, for we cannot assume responsibility for loss, damage or condition of the plants sent this way. However, if you do wish your shipment by parcel post, please send us funds to cover the postage, for we do not

pay transportation charges on orders sent out either by parcel post or express. Live fish are shipped in water and must go by express.

Water lilies and aquatic plants may be shipped safely any time of the year. Hardy water lilies may be planted anytime, but we cannot ordinarily take them from the growing ponds until late in April. Contrary to the erroneous advice, late planting does no harm.

Tropical lilies may be set out whenever the weather is settled and the temperature averages 70 degrees Fahrenheit. This means they may be planted about June first in the latitude of New York, Cleveland and Chicago.

Gold fishes, aquarium plants and supplies are shipped in ordinary cans from June 1 to October 1, but the remainder of the year it is best to use one of our special shipping cans, well insulated against cold. A deposit of \$3 is required to insure the prompt return of the insulated can.

As our success depends upon the quality of our service, a little reflection will convince you of our obvious desire to render you full satisfaction. Should we make an unintentional error in filling your order, a courteous letter from you will surely get results.

TERMS. (Effective Jan. 1, 1930). These prices cancel all other prices. We accept orders only when accompanied by funds sufficient to cover the price of the goods and 50 cents extra for the shipping pail when fish are included. Please note that we do not pay express charges or postage on any shipments. Fishes cannot be sent by mail. We ship good stock carefully packed, but after the shipment has left our hands, we assume no responsibility whatever for delay, loss or damage in transit, nor for results after arrival. **NOTE:** We make a charge of \$1.00 to cover overhead costs on orders which are canceled. This \$1.00 is deducted from the remittance when it is returned.

CULTURAL DIRECTIONS. We have included these in detail in this catalog. Also, for your convenience, we have them printed on small leaflets which will be sent you on request.



TRICKER'S FAMOUS TUB GARDENS

WATER gardens have become the vogue—and now that it is possible to have a complete water garden in a small tub, the entrancing beauty of the Nile can be brought in miniature to your own yard. Happily, water lilies and aquatic plants thrive and bloom in small containers. It is easy to obtain a tub for this purpose, but we make it especially simple for you by sending a tub with our Tub Garden Collection of plants. With a tub garden you can transform an uninviting spot into the center of interest in your home grounds.

No yard is too small, for the tub garden requires a space no larger than four by four feet. Place the tub in a sunny position and plant perennials and rock plants around it. If you have a few rocks to spread about, plant the rock flowers among them. Still further interest can be added to the water garden by putting some lively ornamental fishes in it—then you also have a fish pond. A single tub makes a complete water garden, but many people group two or three of them together for an even lovelier effect.

If you live in a congested area of a city, you may have a water garden too. Many city people are enjoying their tub gardens on fire-escape landings, porches and roofs. Once you have a tub garden you will find it a source of never-ceasing interest.



FISHES

For the Tub Garden

No pool—even if it is a miniature one—is complete without a few ornamental fishes. Goldfishes illuminate the water with flashes of red-gold. Tropical Fishes are very much at home in the tub garden and pay for their keep as mosquito chasers. Put in a few fishes in the spring, and in the fall you will probably have enough to stock a good sized indoor aquarium. A particularly interesting collection is: 2 calico fishes, 4 mosquito killers, 3 tadpoles, 6 snails, 1 salamander, 1 clam, 1 geographic turtle; 18 fishes and scavengers in all, with shipping can, \$3. Collection No. 30F.

PAUL HARIOT

Tub Collection

Includes 1 charming orange-pink Paul Hariot Water Lily, 1 Water Lily Tub, 6 Aquatic Plants, 6 Hardy Perennials or Rock Plants, and 1 Pr. Live-bearing Jap Snails. (Completely described on next page.) Collection complete for\$7.50

GLORIOSA

This exquisite hardy red Water Lily may be purchased singly for \$5 each; with tub collection in place of Paul Hariot\$8.50

A COMPLETE TUB GARDEN - \$5.00

Including Water Plants, Rock Plants,
Cedar Tub and Scavengers

Hundreds of these collections were sold last year and we have received expressions of the highest satisfaction from our customers. This is what you get in the collection:

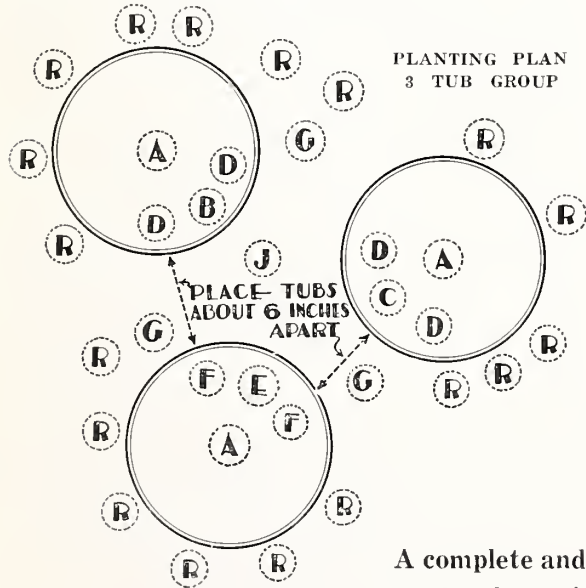
- 1 Tricker Water Lily Tub, 2 feet in diameter and 1 foot deep, made of white cedar so it will last a long time.
- 1 Water Lily, your choice of a variety of pink, blue, white or yellow.
- 6 Aquatic Plants, Some to be planted in the tub like the lily and others to float on the water.
- 6 Rock Plants or 6 Hardy Perennials.
- 1 Pair Livebearing Japanese Snails.

This makes a complete water garden that will delight you all summer. Be sure and tell us your choice of the color of your lily. This collection may be ordered without the tub by deducting \$1.50 from the collection price. Sent F. O. B. from Saddle River, N. J. or Independence, Ohio. Complete\$5

OTHER TUB COLLECTIONS

You may have your choice of one of the finer lilies listed below with the same plants, snails and tub offered in the \$5 collection. These complete collections can be had for the price listed opposite each lily. Choose your favorite lily and we will supply the rest.

Variety	Complete Collection
Gloriosa, Red, as illustrated on page 4	\$8.50
Paul Hariot, Changeable Orange-Pink, page 4	\$7.50
Chromatella, Best Yellow	\$5.50
Blue Beauty, Rich Blue	\$6.00
Marliac White, Sparkling White	\$5.50
Aurora, Yellow	\$5.50
To make your tub garden flourish use Praefecta, the ideal fertilizer for Tricker Lilies. Carton for tub,	
	50c



How to Make a Tub Garden



THE best effect will be gained by sinking the tub in the ground right up to the rim. Fill the tub half full of rich soil, cover this with half an inch of clean sand and fill with water. The little "pool" is now ready for the water lilies, aquatics and perennials, rock plants and fish. The drawing shows a cross section of a tub garden with plants and water lilies as follows:

- | | |
|-------------------|----------------------------------|
| 1. Rock Plants | 6. Umbrella Fern |
| 2. Rocks | 7. Shell Flower or Water Lettuce |
| 3. Giant Arrow | 8. Snails |
| 4. Water Lily | 9. Oxygenating Plants |
| 5. Water Hyacinth | |

EXTRA TUBS

Yes, you can order extra tubs if you like. They are used extensively in pools as soil containers in which to plant lilies and aquatics. These white cedar tubs are strong and will last a long time. The hoops are heavy wire, electrically welded. \$2 each.

3-TUB GROUP Offer

A most complete and charming water garden can be made by grouping three tubs and planting the lilies, water plants and perennials in this collection.

KEY TO PLANTING PLAN FOR THREE TUB COLLECTION

- | | |
|--|--|
| A—3 Water Lilies, white, pink, and yellow or blue. | F—2 Water Poppy. |
| B—1 Arrowhead. | G—2 Variegated Ribbon Grass, 1 Astilbe. |
| C—1 Spiral Palm. | J—3 Japanese Iris. |
| D—4 Forget-me-not. | R—18 Rock Plants. |
| E—1 Pickerel Rush. | |
| | 3 Oxygenating Plants, Water Hyacinth, Shell Flower, and Parrot Feather placed where desired. |

Complete collection includes a total of 3 Lilies, 15 Aquatics, 18 Rock Plants, 6 Perennials, 3 White Cedar Tubs, 12 Assorted Snails, 6 Tadpoles, 2 Calico Fishes, 4 Mosquito Killers (Tropical Fishes), 1 Geographic Turtle.

A complete and charming garden, pool included, only\$16

Be sure and order a few Fish with your Tub Garden.



IT IS EASY TO BUILD A LILY POOL

THE building of a lily pool is really an easy accomplishment. So many of our customers have built their own pools. We know it can be readily and successfully done without great expense, especially if the pool be a small one.

Formal Pools

Most people prefer to build the formal (square or rectangular) pool with straight sides. An average pool is made by excavating 30 inches deep, and building an inside form which allows a thickness of 6 to 8 inches for the walls and bottom; the sides should be reinforced with rods or wire netting to prevent injury by frost.

A pool can be made without forms, by first digging a trench as a form for the walls, and after these have set the center is dug out and the bottom poured. The top edge may be finished neatly or replaced by rough stones or boulders. It is desirable to leave it lower than the ground and cover with sod or trailing vines.

MIXING AND APPLYING THE CONCRETE.

Good results are obtained from a mixture of one part good Portland cement, two parts sharp sand, and three parts half-inch gravel or crushed stone, blended with water and poured into the wetted forms to set as a unit. The forms may be removed when the concrete is firm and the rough places smoothed down with a brick, or a thin coat of cement may be put on with a trowel or even with a paint brush.

IMPORTANT CAUTION. Newly poured concrete should be kept moist for several days by sprinkling or by a covering of moist straw or bagging. It is best to fill and empty the pool several times during a period of at least two weeks to remove alkali which may injure plants or fish.

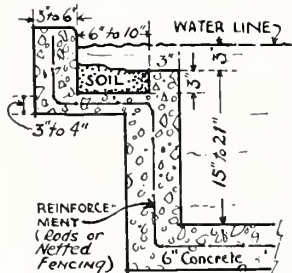


Figure 1. Detail of form of pool showing ledge for aquatics.

A LEDGE FOR AQUATICS.

Many of the aquatics need to have their feet in the mud in shallow water. As these plants are particularly desirable along the edge of the pool, many people construct a ledge to provide for them. Instead of the side of the pool being brought straight up to the water level, it is set back a few inches below what would be the water level so as to make a ledge or shelf (See Figure 1). The inner wall is made higher at the edge of the ledge to hold in place the soil needed for the aquatics.

Informal Pools

Excavate a bowl-like depression, leaving sides at about a 45 degree angle. Tamp earth bottom and sides. Line sides and bottom with heavy wire fence mesh, supporting it at a distance of 2 inches from the ground to permit concrete to entirely surround reinforcing. Prepare stiff 1-2-3 concrete mix using 1/2 inch stone.

Pour a 4 to 6 inch layer of this concrete covering sides and bottom and enclosing wire reinforcing. Smooth with a trowel. When it has set a few hours waterproof with a thin coat of cement applied with a trowel or brush. A coping of field-stone, flat stone, or brick may be placed around the rim while concrete is soft. Intake and outlet drains may be installed as in the formal pool if desired; these are often omitted to save expense in small pools, which can be easily filled by using garden hose and drained by siphoning.



This attractive pool was photographed just six weeks after planting. Note the abundance of lily bloom and miscellaneous aquatics in the background. Pool of Mr. J. E. Griffin, Monroe, La.

WINTER CARE OF POOLS.

Unless heavily reinforced, a concrete pool is likely to need protection in winter as the expansion of ice frequently cracks the walls. A small pool may be covered with boards and litter so that little or no ice can form on it.

If you are in doubt about any point in the construction or care of your pool, we will be glad to advise you about it.

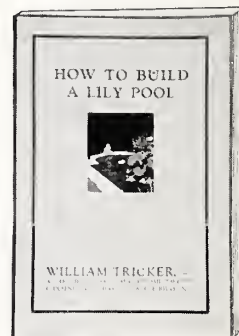
Ponds, Tubs and Tanks

A pond is easily made by damming a small stream or spring, but it is advisable to direct the flow away from the places where the water lilies are to be grown. A hole dug at the side of a stream and filled by backwater makes an ideal pond. Clay soil is very suitable for pond construction by simply digging a pond 2 feet deep, tamping the bottom and sides and filling in 6 inches of good soil. But if the excavation must be made in loose or porous soil, it is also practical to line the sides and bottom with 6 inches of clay which has been pounded and worked with boots until it is plastic.

An ordinary wash tub or half cask will do for a miniature water garden. Some of our customers have used a stock watering tank made out of galvanized iron and sunk this in the ground for a pool.

HOW to BUILD a LILY POOL

Complete directions for building all types of pools printed in an attractive pamphlet sent on request.



Scavengers are the housekeepers of the pool. See page 44.



WILLIAM TRICKER INC.

INDEPENDENCE, OHIO.



A CHAT ABOUT OUR WATER GARDENS

*Immense Facilities Devoted to Serving Lovers
of Water Plants and Fishes.*

IN 1928 the water lily business of William Tricker (formerly located at Arlington, N. J.) was combined with the aquatic plant and fish department of the Independence Nurseries. Now it matters not in what part of the country you live, whether East or West, we offer you complete service from two convenient shipping points. One is at Saddle River, N. J., and the other at Independence, Ohio.

This assures you excellent service, no matter where you are located. Better still, you can make your selections of water plants and fishes from the combined stocks of the two most complete sources in the country—now united into one efficient organization to make water gardening a real pleasure for you.

You'll Enjoy A Visit to Our Plants

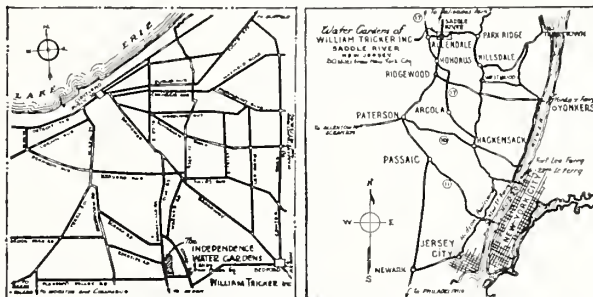
Our water gardens at Independence, Ohio, are just a short drive out to Cleveland. The Saddle River plant is easily reached from New York City and its environs, as indicated in the maps above.

At each water garden we have extensive greenhouses, growing pools and aquariums. We have added 34 acres, new greenhouses and 85 new pools in the past year alone. The glorious displays to be found at both places make them a mecca for motorists and an inspiration to those who love colorful aquatic plants, as well as moisture-loving perennials, and fishes.

We welcome visitors at either water garden any time of the year except during May and June—during these months we are the very busiest and all our time is required to fill orders, so we cannot accompany guests through our buildings and grounds.

Research and Advisory Service

This department was established in order to study the practical problems of water gardening. Under the competent direc-



These maps show our location in relation to Cleveland, Ohio, and New York City.

tion of our Aquarists, J. W. Doscher, at Saddle River, and J. T. Charleson, at Independence, many new and interesting experiments have been made during this last year. These experiments enable us to improve the quality of our products and give you the very best of service. The propagation, nutrition and care of both water lilies and fishes are being constantly investigated and thoroughly studied. Special efforts are devoted to the cause and cure of maladies peculiar to the finny tribe. This Research Department is your assurance that you will receive only the most practical advice in regard to your water gardening problems.

In this catalog we have tried to give you more than just a listing of items and prices. It is a real reference book—one that you will want to turn to many times. You will find valuable information about pool construction and tub gardens, suggestions for harmonious arrangements of water lilies and plants, advice about the care of ornamental fishes—just the very things you would like to know about water gardening. Whenever further information is needed we are glad to furnish it, if you will direct an inquiry to us.

We also have a pamphlet on the construction of pools which we will gladly send to any customer requesting it.

A view of part of our new show room at the Independence plant. The rare and beautiful fishes from all parts of the world that are on display here, have been of great interest to the many visitors who come to our water gardens. Our aquariums are open to visitors every afternoon. You will find our extensive displays intensely interesting.



This Year's New Introductions of Lilies, Plants and Fishes on Pages 10-11.



FOUR BEAUTIES

On these two pages we illustrate four exceptionally lovely water lilies in the pleasing dainty shades. The delightful colors of these exquisite blooms will make your water garden a real beauty spot. In addition to their attractive colors, the different types of blossoms lend variety, as well.

PAUL HARIOT

This hardy lily has been so popular it has been difficult to supply the demand. When the flower opens it is clear yellow the first day, orange-pink the second day, deepening almost to red on the following days. Large, magnificent blooms are borne in abundance all season.\$4

EUGENIA de LAND

Everyone who has grown this lovely Eugenia de Land has been most enthusiastic about it. The fine-petaled flowers are borne on the surface of the water where their delightful color forms an attractive contrast to the green leaves. It is a hardy variety and the unusually large blooms are produced in great numbers throughout the season.\$1.50



The New York Horticultural Society awarded a Silver Medal to Rose Arey for its exceptional merit in every respect.



ROSE AREY

(Above)

This variety is in the front rank of the water lilies because of its color, freedom of bloom and strong growth. The flowers, a deep cerise pink, sometimes reach 8 inches in diameter. We consider Rose Arey one of the best of the odorata type.....\$3

CHROMATELLA

(Right)

This clear, rich yellow variety is the best variety of this shade ever grown. Flower appears very striking against the leaves which are beautifully marbled in deep green and brown.\$2





NEW VARIETIES OF WATER LILIES

*of Unusual Merit and
Superior Beauty*



THE well known varieties of water lilies, of course, form the bulk of our list, but in addition to these we strive each year to produce new and superior types. This work takes some time and skill—hundreds of trials and disappointments must be met before a satisfactory new lily is produced. As this plant develops and the blossom fulfills all hopes, then the hybridizer feels the thrill of work well done and realizes that his efforts have not been in vain. Each year we introduce a few of these choice varieties—an opportunity for you to have the desired “something new” for your pool.

Hardy Water Lilies *Beautiful New Colors*

RENE' GERARD. This is the queen of all hardy nymphaeas. You will find the flowers are of exceptional size. Sometimes they are ten inches across and very distinct in form with numerous petals, wide at the base, curling at the edges and tapering to waxy points. Their prevailing color is a charming blend of deep old rose which is produced by myriads of tiny flecks of crimson on a white background. It is a splendid recent introduction from L' Etablissements Latour-Marliac, Temple-sur-Lot, France. \$15.

SUNRISE. You will have to see this to believe it. As the name suggests it is a glorious yellow that opens earliest of all. Enormous flowers attaining a size of eight or nine inches even on young plants, easily the largest hardy lily.

The buds are olive brown with a salmon flush. The long narrow petals stand at various angles, and with their curved sides and crinkled tips give the appearance of a giant chrysanthemum. The general color is a clear yellow with a touch of fluorescent green, the stamens rich lemon chrome. The leaves are almost egg shaped, with wavy, crinkled sides, deep green above and red flecked with dark red brown below. Unusual in form, beauty and fragrance.

It is easily the most magnificent yellow lily—an outstanding beauty in any group. This year we have a more complete stock of Sunrise and offer this splendid variety at a lower price. \$7.50.

NEWTON. The very large star-shaped flowers are a pleasing rosy vermillion with striking white sepals. Long, orange colored stamens. An unusual and beautiful variety. \$10.

MASANIELLO. Some years ago we introduced this splendid French Hybrid but all too soon our stock was sold out. Lately it has received much attention and we are again offering this fine variety. Its cup-shaped flowers are pink dotted with carmine and have a most pleasing fragrance. A free bloomer and very desirable. Special, indeed, at \$3.50.

CONQUEROR. Similar in form to Attraction but is a more prolific bloomer. It is a much brighter red and the inside of the sepals is white, making a pronounced contrast with the petals. Free grower and free bloomer. \$5.

SHIPMENT ARRIVES SAFELY IN ENGLAND

12th June, 1929.

Dear Sirs:

I am instructed by Mr. Lionel de Rothschild to thank you for the Water Lilies which have arrived safely, and to send you the enclosed cheque, value \$100.50.

Yours faithfully, F. E. Milborn, London, England.



The new Tropical Lily Marmarata which graces this lovely pool at the home of Mr. John S. Van Gilder, Knoxville, Tenn.

New Tropical Lilies

Day and Night Bloomers

MARMARATA. A splendid variation of Mrs. Edward Whitaker. The flowers are identical in color, being a beautiful lavender-blue, but they are of larger size and are produced very freely. The main difference is in the foliage. The attractive green leaves are mottled and streaked with chestnut brown, making a striking contrast. \$3.50.

KEW. This night blooming lily is not really a new variety, but it has not been offered for a long time due to its scarcity. We have worked up a good stock of this which originally came from Kew Botanical Gardens in England. It is not so rampant a grower as most of the night bloomers, but it blooms freely. The delicate pink flowers are quite large; the leaves are green, streaked and mottled. \$3.50.

A lily pool will be the most alluring spot in your garden.



Independence Hybrids

These four tropical water lilies are the finest achievements in hybridization and are the results of careful research at Independence Gardens.

COL. LINDBERGH (A true blue.) This has enormous flowers with wide petals of deep caerulean shade which surpass all the other blue nymphaeas in size, fragrance, color and beauty. As the name implies, the flowers tower in the air high above the water and the small plants which spring from the center of the leaves. The leaves are large and oval and pleasingly marbled with brown on top and flaked with purple and brown blotches beneath. We offered the Col. Lindbergh as our finest contribution for the season of 1929. \$10.

PATRICIA (Princess Pat). A wholly charming and marvelously free-blooming lily. It may be a little strange for a water lily to have a nickname but we ask you to express your preference after seeing this beautiful flower. The plant is a counterpart of its parent, The Panama Pacific. Red flecks replace the purple on the under leaf; copper bronze, the olive purple of the buds, and Crimson of Tyre, the familiar purple of the petals. The Patricia is one of the true Independence hybrids in that it bears young plants from the center of the leaf. Being unusually prolific we are able to introduce it at a comparatively low price. Of moderate growth, it is admirable for tub culture or for use in small pools. (1929) \$7.50.

JANICE. An exquisite pure white flower, bell-shaped with many stamens. This tropical day bloomer is the finest achievement of modern nymphaea culture, being the first white lily to bear small plants on its leaves as well as being superior to both of the present white tropical lilies. The shape of the flower is different from the star-shaped Mrs. Pring which was crossed with Independence in producing this fine new variety. Janice is a purer white and more handsome flower than either of its parents. Its superior flowers will contrast beautifully with lilies of other colors. (1928) \$5.

INDEPENDENCE (Mrs. Sawyer). We are again introducing this variety. This time it is being done under its original name, Independence, as it typifies our first and perhaps greatest novelty, a viviparous nymphaea of deep pink coloring instead of the regulation blue of that class. It has a gorgeous, full-petaled flower that opens earlier and closes later than any other day bloomers. The plant is vigorous in growth and free-flowering. In fact many of the leaves produce large buds and flowers when the tiny leaf plants have scarcely unfolded their leaves. (1927) \$5.

NEW AQUATICS

These new aquatics merit their position of honor at the head of 1930 offerings. They will add interest and variety to your aquatic garden. As some are improvements over the more common varieties we know you will be pleased with their unusual qualities.

VIOLET STEMMED TARO (*Colocasia Violacea*). One of the very striking Taros. The leaves are a beautiful blue-green. The stems, mid-ribs and veins underneath the leaves are a lovely lavender, the same color being repeated in the edges of the leaves. We do not think that this variety has ever been offered before and we are glad to give you the opportunity now of securing this unusually attractive Taro. \$1.50 each.

IMPERIAL TARO (*Colocasia Antiquorum Illustris*). The finest of the Japanese Taros. The leaves are attractively blotched a dark brown and violet black. This makes an excellent center piece for the small pool or a very satisfactory house plant when potted and grown in a jardiniere. \$1.

DOUBLE FLOWERING ARROWHEAD (*Sagittaria Japonica Flora Plena*). A plant like the Giant Arrowhead in foliage but one that develops a spike of beautiful double petaled white flowers. Grows well as a bog or shallow water plant. \$1 each or \$10 per doz.



The Taro with its large colorful leaves is a striking addition to any pool.



Patricia, similar in form to Panama Pacific but its color is described as "Crimson of Tyre."



Some Tropical Lilies are viviparous — that is, they produce young plants from the surface of the leaves. The lovely Independence Water Lily illustrated above belongs to this interesting class. Notice the baby plant which is growing from the center of the leaf.

NEW ORNAMENTAL FISHES

Each year we introduce new varieties of fishes. Our finest introductions this year are the handsome Betta Trickeri and the colorful Geophagus Braziliensis. Both are listed on this page and also illustrated in color on page 40.

BETTA TRICKERI. This variety, a fish of our own development, will captivate you with its grace and lovely coloring. The long flowing fins and tail give excellent display of the beautiful blues, red, greens, gold and other colors that make this fish the jewel of the aquarium. Illustrated in color on page 40, No. 31. Medium size, \$5 per pr.; Large, \$7.50 per pr.; Extra Large, \$10 per pr.

GEOPHAGUS BRAZILIENSIS. You'll like this colorful medium-sized fish from the waters of Brazil. A pretty green background with stripes and dots of various colors. Illustrated in color on page 40, No. 35. Medium size, \$2 per pr.; Mated Pairs, \$3.50.

ACARA CURVICEPS. One of the most brilliant Cichlids. Has beautiful silver blue body with orange and red dots and streaks. Same habits as other Acaras.

HEMIGRAMMUS UNILINEATUS. A little more compressed than other Tetras. Color glistening silver green. All fins edged with black and opaque white. An oblique black line runs length of dorsal and anal. \$3 per pair.

MOENKAUSIA OLIGOLEPSIS ("Red Eye" Tetra). A new introduction a little larger than the Tetras, attaining size of 2½ to 4 inches; body glistening silver white shaded with green and pink. Eye is brilliant red. Very attractive and easily kept. \$4 per pair.

The New Tropical Fish, Betta Trickeri, Appears in Color on Page 40.

FRANK TRELEASE

A glorious night-blooming Lily. Certainly a Lily colored so gorgeously should find a place in every pool. Its rich red blooms appear to particular advantage when light colored varieties about them offer a comparison. Each\$2



BLUE BEAUTY

In color this variety seems to reflect the blue of the summer sky, with the stamens marking golden lines over the petals. The flowers are larger than most of the tropical lilies, and come freely and continuously all summer. A collection without Blue Beauty will certainly lack one of the best day blooming varieties. Each\$2.50





TROPICAL WATER LILIES

*Gorgeously Colored Flowers—
Lovely in Fragrance*

SOONER or later everyone wants to grow some tropical lilies. Their immense size, rich color and delightful fragrance make a combination that is hard to withstand for very long.

Considering their intensive blooming season and the quality of their flowers, tropical lilies are the most economical and beautiful garden flowers. As cut flowers they last from three to five days.

The size of their bloom depends greatly upon the room given the plant, the amount of soil and the warmth of the summer. The quantity of flowers produced is really remarkable—we have had plants that produced over 100 flowers in a single season. These lilies adapt themselves to any amount of soil and will thrive and bloom in the tub garden, but, of course, the flowers will be smaller. They are best suited for artificial pools, and a box of soil 2 feet square by 1 foot deep is none too much to provide for each plant. Our white cedar tubs are just right as containers. Allow a surface space at least 5 by 5 feet. For an unusual display, place two plants in a 3 foot box and allow a little more surface space.

The tropical water lilies are all started in tanks in our greenhouses. The young plants are started in pots and are turned out of these before packing. They make very rapid growth but should not be planted until warm weather is assured. In the latitude of New York City this is late May or early June. The plants soon begin to develop and flower—the climax is reached in August.

Although tropical lilies will winter in greenhouse pools, the splendid bloom from young, vigorous plants more than offsets the slight extra cost of new plants each year.

Night-blooming varieties are listed on page 14. Day-blooming varieties appear on page 15, with a general list on page 16.

We manufacture a splendid assortment of Aquariums. See page 47.



MRS. C. W. WARD. This most charming variety has petals of a rich rose-pink, illumined by a mass of golden stamens. The flowers are borne well out of the water, in great profusion. This day-blooming tropical Lily is an attractive addition to any pool.\$2

Night-Blooming TROPICAL LILIES

These non-union workers flaunt their colors in delightful array all night long when the other lilies are closed.

Since a lily pond is usually the show place of the garden, it is always worthwhile to have night-blooming varieties that will be open in the evening when one usually entertains guests. After a dinner party it is too late for any other varieties to be open. Those who are able to be in their gardens only in the evenings will particularly enjoy the night-blooming lilies.

These varieties are particularly interesting because they are the oldest of all known flowers. Undoubtedly they are the true Lotus of the Nile.



NIGHT BLOOMING LILIES

The Finest Five

WE are recommending a few outstanding varieties that are of exceptional quality and beauty. Their flowers are of magnificent size and gorgeous colors. No planting is complete without a representation from this group. A general list of varieties will be found on page 16.

BISSET. A night bloomer of unusually free-blooming habit. The flowers are of a beautiful rose-pink color, 8 to 10 inches across; the petals are broad and slightly concave, giving the bloom a cup-shaped form. \$2.

FRANK TRELEASE. The most popular lily of its type because of its rich color. The flowers are a dark crimson with mahogany colored stamens. The petals are long, narrow, and rounded at the ends. The mottled, dark red and green of the young leaves merge to a bronze red in the matured plants. See colored illustration page 12. \$2.

JUNO (Dentata Superba). The most perfect modern flower developed by cultivation from the sacred white Lotus of Egyptian tradition. Blooms easily 8 to 12 inches across and persists all summer and fall, making the plant a magnificent sight in the morning. Has a flower of great decorative charm since it is composed of very broad, heavy petals that open widely revealing wide, flat, saffron yellow stamens. Illustrated in color on outside back cover. \$3.

OMARANA. A lily quite deserving of its popularity. Its general effect is a pleasing, variegated pink produced by deep shading on the outer edges of the petals that fades into a white stripe through the center line. Flowers are quite large. \$1.50.

RUBRA ROSEA. The most productive of all the Nymphaeas. Our exhibition plant usually has 5 to 8 blooms open at one time and is always enthusiastically praised. There is some question about the color of the lily corresponding to this name, as the original Nymphaea rubra differs in various localities in India. Our strain is a rosy carmine and is quite star-shaped due to the unusual shape of its petals which are broad at their base and taper to a long point. (Illustrated in color on outside back cover). \$1.50.

Any of the above five with tub collection for \$3.50 extra.



Night Blooming Juno, one of the finest five.

COLLECTION

*The Finest Five Night
Bloomers*

BISSET. Rose-pink.
FRANK TRELEASE. Dark Crimson.
JUNO. Magnificent white.
OMARANA. Variegated pink.
RUBRA ROSEA. Rosy Carmine.
One each, value, \$10.
Special group price **\$7.50**

(Collection No. 1)

For aquatic plants to be used in the pool that will carry these lilies see No. 22, page 27.



A Successful Pool

September 17, 1928.

Gentlemen:

The lily pool which I built this spring, and for which you furnished the lilies, etc., has turned out to be a great success. Although not started until the 24th of June, the first lily blossom appeared on the 23rd of July. Since that time there have been blooms every day and they are still going strong the 17th of September.

In this pool, which is 4 by 8 feet in size, there are three lilies—Blue Beauty, Gloriosa and Morning Glory. Also all the aquatic plants, fish, etc. you sent me.

The pool has attracted many visitors, and some of them, who are much traveled, have pronounced it the most attractive and interesting pool they have seen.

I found that Ebony Spleenwort Ferns planted among the moss-covered stones showing in the foreground worked out well. Also a few Royal Ferns and a bunch of native water grass help out the background in good shape. Small fountains springing from the rocks at each end of the pool are turned on occasionally to replace the water lost through evaporation.

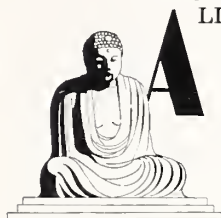
Yours very truly,
John E. Ring, North Chatham, N. Y.

Complete Pool Collections are Listed on pages 28 and 29.



Day Blooming Tropical WATER LILIES

*Exquisite Colors
Magnificent Flowers*



ALL of the varieties listed on this page may be dwarfed for use in tub gardens or permitted to develop magnificent blossoms in the largest pools.

Also, in addition to the collection listed here, we have arranged many desirable groupings of both tropical water lilies and hardy varieties. Turn to pages 25 to 29 to see

these unusual collections.

Although these seven have been well proven the most popular with our customers, we list on page 16 our general list of varieties. This general list is selected from hundreds of varieties and includes only those of general excellence and beauty.

The Seven Most Popular Varieties

We have selected for you, as the seven most popular varieties of day blooming tropical water lilies, those which have the greatest flower production, color range, fragrance and proven popularity.

BLUE BEAUTY (or Pennsylvania). Deep blue flowers a foot across and produced very freely. The yellow stamens form a pleasing contrast to the petals. Sepals marked with purple lines and dots. The leaves are slightly speckled with brown above; beneath the ground color is red-purple at the edge, shading to pale green centers. Desirable in a small pool or tub. Very choice but popularly priced. (See colored illustration page 12.) Our best seller. \$2.50.

GENERAL PERSHING. This variety was named in honor of our great General, but on its own merits has gained wide distinction. Without doubt, it is the finest of all pink tender lilies, both in size and color. Being a hybrid from Mrs. Whitaker and Castalia, it has inherited its size from the former but is an improvement upon the color of the latter. The dark green buds are striped with purple. The sepals are very light pink on the inside, but the petals are a warm bright pink. The flowers are of great substance, delightfully fragrant, open early in the morning, and are indeed most distinct from any of the other pink day blooming water lilies. A most prolific bloomer; awarded silver medal of the Society of American Florists in 1923. Strong plants, \$5.

MRS. ED. WHITAKER. The largest and most striking of the day blooming tropical lilies, obtained by crossing Ovalifolia with Castalia. The blooms are frequently over a foot in diameter and are produced in quantity. The color is lavender-blue, which becomes paler as the bloom ages. Petals slightly rounded at the tips and quite numerous. In all our exhibitions we have found no nymphaea attracting greater admiration than the Whitaker. At its best in a large pool, but blooms readily from three inch flower pots in a pail of water. A bouquet which lasts all summer, \$3.

MRS. GEO. H. PRING. A new and novel type that produces numbers of large, fragrant, white flowers with pointed petals. Very attractive among the pinks and blues in a pond and excellent when used alone in a formal setting. It is the counterpart of the Mrs. Whitaker in pure white. Petals broader at the base and more pointed at the tip. Has been known to produce 13 inch flowers, but like the Whitaker, will also bloom in very small quarters. It is unusual that this, the only hybrid white lily, should be so superior in every respect to the common white Gracilis of Mexico. Will combine with any color. \$2.50.



COLLECTION

*The Seven Most Popular Day
Blooming Water Lilies*

**Red, White, Blue, Pink,
Lavender, Purple**

Value \$20.50.

Special group price \$15

(Collection No. 2)

For complete pool
planting add collec-
tion No. 22, page 27.

AUGUST KOCH. As a variety suitable for all general purposes there is none that surpasses August Koch. This water lily first came to our notice in 1922. It resulted from a natural cross in the lily-pools at Garfield Park, Chicago, under the care of Mr. August Koch, the chief florist. It belongs to the same group as Dauben, Mrs. Woodrow Wilson, and Panama-Pacific, all being viviparous (by this is meant the peculiar characteristic of producing young plants upon the surface of the leaf). We have had this variety continue in bloom for over three years in our greenhouses. In fact the original plants that we first received are today in flower and have not been without flower for over four years. The flowers are 7 to 8 inches in diameter and open for four to six days. The sepals are purplish lilac and the petals pale wistaria-violet (Ridgeway color chart). Foliage strong and attractive. (See colored illustration on page 17.) \$2.50.

MRS. C. W. WARD. A most charming variety with petals of rich rose-pink illuminated by a mass of golden stamens. Flowers are borne well out of the water, with the profusion of the Gracilis type from which it is a descendant. (See colored illustration on page 13.) \$2.

PANAMA-PACIFIC. This variety was produced by the late William Tricker. It is everblooming, viviparous, strong-growing and free-flowering. The buds, as they come out of the water, are bronzy green spotted with a reddish brown, opening rich, rosy red, which is quite pronounced in the full sun. When fully opened, the predominant color is reddish purple and the stamens are yellow. This is a new and distinct color in water lilies. An excellent variety for the conservatory in winter. \$3.

Any one of the above seven with tub collection for \$3.50 extra.



Mrs. C. W. Ward

Blue Beauty

A water garden will be a distinctive addition to your home grounds.



General LIST OF TROPICAL WATER LILIES

Any of the following Lilies may be had with the tub collection for \$3.50 extra.

BLUE BIRD. This beautiful lily was named after listening to the praise for it made by visitors to our nurseries. Its flower is a rare, true blue color that is uniform throughout the petals and sepals. It is full-petaled and slightly cup-shaped. You will like this exquisite flower. Its pure color will loom up in a delightful display above the water. It has distinct class, the character of which you would expect in a new and rare creation. A day bloomer. \$5.

CAERULEA. This is the ancient blue Lotus of the Nile. Day blooming. (See colored illustration on front cover.) \$1.50.

CAPENSIS. This lily has flowers of a rich sky blue. It is particularly popular for cutting. \$1.50.

CASTALIA. The flowers are very large and fragrant and colored a light pink. A day bloomer. \$2.50.

DAUBEN. The best known viviparous lily. It produces small, light blue flowers in great profusion during the day. Its small leaf plants often bloom while still attached to the parent. Fine for tub or aquarium. \$1.25.

DEVONSHIRE. The bright rosy red flowers of this lily bloom well out of the water. This plant is one of the most desirable of the night-bloomers. \$1.50.

GEO. HUSTER. A free-growing and free-blooming variety with flowers that are from 10 to 12 inches across and crimson in color. Surely this is a most desirable member of the night-blooming water lilies. \$2.

GRACILIS. This is the white, day-flowering, tender Nymphaea of Mexico. The flowers are sweetly scented. \$2.50.

GRACILIS ROSEA. The flowers of this plant are rose pink and are star-shaped. A reliable day bloomer. \$2.

GRACILIS RUBRA. Has rich red colored, star-shaped flowers, and is also a good day bloomer. \$3.

HENRY SHAW. This lily is a beautiful campanula-blue color and has stamens of lemon-chrome tipped with light campanula-blue. It is a moderate grower, a free bloomer, and has a delightful fragrance. It is an excellent day blooming variety that has been named in honor of the founder of the Missouri Botanical Gardens. A beautiful lily. \$3.50.

INDEPENDENCE. This lily has a gorgeous, full-petaled flower that opens earlier and closes later than any other day-bloomers. See full description on page 11. \$5.

INDEPENDENCE BLUE. Flowers are a very fine shade of blue. \$2.

INDEPENDENCE PINK. Similar to the Independence Blue except that it is a pink hybrid. \$2.

JANICE. An exquisite pure white flower, bell-shaped and with many stamens. See full description on Page 11. \$5.

JUPITER. (Zanzibar Purple). The most popular of the Zanzibar lilies. The flowers are a deep blue with purple tints and very attractive. This day-blooming African Lily has characteristic bell-shaped flowers and very many stamens that are strikingly different from all other Nymphaeas in form and fragrance. The plant is very adaptable and thrives whether the roots are confined in a small pot or in a large box. A superb variety. \$3.

LOTUS DENTATA. A gorgeous white night bloomer. \$1.50.

MRS. WOODROW WILSON. This lily has lavender-blue flowers of large size. It is an extremely satisfactory day blooming variety for medium sized pools. \$2.

PRINCESS PAT. A wholly charming and marvelous free-blooming lily introduced in 1929. See full description on page 11. \$10.

ROSE MARIE. A gorgeous day blooming pink lily. Its leaf plants produce very freely. \$5.

STELLA GURNEY. Its flowers are large, star-shaped and a light pink. A variety that pleases. \$2.

MRS. PRING

Because of its color, fragrance and size, this 1924 introduction has become the most popular white tropical day blooming water lily. Pure white, of large size, (8 to 10 inches across), extremely fragrant, and most prolific in blooms, it has aroused admiration wherever seen.

Each\$2.50



Tropical Water Lilies are not shipped until it is warm enough to plant.



STURTEVANT. This exceedingly beautiful night blooming lily has just been recently produced. The flowers are 8 to 12 inches across and a bright red. This variety produces a striking effect when several of the immense flowers open in a group. It requires liberal treatment and a hot summer to bring it to its greatest perfection. One of the very best Nymphaeas, making an ideal center piece for a large pool. \$2.

WILLIAM STONE. This is a particularly attractive violet purple lily that was originated by the late William Tricker. The blossoms are star-shaped and open early in the morning and do not close until late in the afternoon. The flowers are carried well above the water. \$2.

COL. LINDBERGH. This lily has enormous flowers with wide petals of deep caerulean shade which surpass all the other blue nymphaeas in size, fragrance, color and beauty. See full description on page 11. \$10.

ZANZIBAR ROSEA. One of the day blooming African Lilies that is colored a delightful pink. \$2.

VICTORIAS

(V. Trickeri)

An interesting aquatic plant characterized by enormous leaves, often 6 feet across, with the edges turned stiffly erect to the height of 3 to 8 inches. The weight of a child is easily supported by the leaves as is revealed by the photograph. Victorias thrive under the same conditions as the tender lilies but for full development require plenty of space.

A variety which does well with proper care in the latitude of Cleveland. The flowers are enormous, 15 to 18 inches in diameter, opening white on the evening of the first day, and closing the middle of the following morning. They assume a pink or glowing red hue on opening the second evening. They are richly fragrant. Adapted only to very large pools or natural ponds where they are very showy. \$10.



Victoria leaf shown is 56 inches across. A cardboard was used to distribute the child's weight over the brittle surface of the Victoria leaf.



AUGUST KOCH. This day-blooming tropical lily is a remarkable bloomer and does exceedingly well outdoors. The attractive flowers are 7 to 8 inches in diameter and will remain fresh for nearly a week. A lovely variety of most pleasing color.\$2.50

A Few Letters from Customers

October 4, 1928.

Gentlemen: You may be interested to know that my pool, which was stocked entirely by lilies, fish, etc., ordered from you, was a complete success. Everything thrived and I am more than pleased with the results. It has been a pleasure for me to recommend your firm to my friends.

Yours very truly,

Harry B. Caton, Washington, D. C.

August 23, 1929.

Gentlemen: The box of water lilies I received from you was packed with what must have been loving care for the plants you have raised, as well as with a deep personal effort to please a customer. As this is the second time you have revealed these things to me, I judge this must be your regular practice.

Each time I open a box you ship to me, I am impressed with the neatness and the orderly arrangement and careful marking of the contents. In addition to this pleasure there is always the matter of the beauty of the lilies or other growing plants.

The enclosed check may pay for the goods, but I can only thank and congratulate you for the fine personal touch of true service you always show me, a mere customer.

Very truly yours,

R. E. Russell, Huntington Woods, Mich.

If you do not find all the information you need here, write us.



NO GARDENING EXPERIENCE NEEDED

Just Follow these Cultural Directions

HOW TO PLANT. Water Lilies are easily grown. One does not need experience in order to be successful. Follow these few suggestions and see the splendid results you get.

In natural conditions Water Lilies root in rich soil in the shallow water of a marsh or pond where there is plenty of sunlight. These conditions are easily reproduced in the garden.

In a natural pond the Water Lilies may be planted where the water is 1 to 2 feet deep. If the bottom is sand or gravel, the roots may be planted in a basket of soil and sunk an inch below the bottom level. Otherwise they may be simply pushed under the soil or anchored with a stone if the bottom is too soft to hold them.

Small pools, including tubs, may best be partly filled with soil—6 inches of soil, 2 inches gravel and 8 inches of water is correct. In larger pools a satisfactory method is to use tubs, boxes or plants in the manner illustrated in the diagram.

At least one cubic foot of soil should be allowed for each Water Lily, and more if possible. To obtain satisfactory growth in boxes they must be large enough to provide plenty of nourishment. A single plant in a box 2 feet square and a foot deep, filled with proper soil, will develop remarkable blooms.

It is best, though not necessary, to have a separate container for each Water Lily as the leaf-spread averages 3 feet in diameter. Shallow water plants may be set in the same box to advantage.

It is not necessary to drain the pool before planting. Boxes and pails in which the lilies are planted can be easily set in the pool. It is also quite simple to set plants in soil beneath the water, as we always do in commercial propagation.

FERTILIZING AND SOIL. The best soil for aquatic plants is a mixture of three parts of fibrous loam or good garden soil with one part well-rotted cow manure. A heavy clay is satisfactory and gives best results if mixed with manure 3 months to a year before planting. Other manure may be used but not when fresh. Its fermentation may foul the pool and injure the young plants. Instead of the manure you may use a new commercial fertilizer we have developed especially for our plants, named Praefecta. Mix one quart with three bushels of soil, or use a small amount anytime to feed plants. An amount for 3 to 5 lilies at \$1 per carton.

Swamp muck should not be used since it is often foul, sour, or low in fertility. New manure or blood-meal should be given hardy Water Lilies each year and new soil every two or three years.

PLANTING. Water Lilies should be set with the crown of the plant just even with the surface of the soil, which is then covered with an inch of sand or gravel to keep the water clean. Eight inches of water above the crown is best for the production of blossoms. Any depth from 6 inches to 2 feet will do, but young plants should always be started in shallow water where the warmth of the sun reaches them. Full sunlight on the pool is very desirable for the growth and formation of blossoms. Plant Water Lilies 3 to 5 feet apart in the pool.

WHEN TO PLANT. Hardy Water Lilies may be planted after the middle of April, as at that time new leaves appear in the ponds. Half-dormant roots are shipped until July and after that growing plants. Tropical varieties are propagated in greenhouse pools and sent out as growing plants when the temperature averages about 70 degrees, usually not until June in the latitude of New York, Cleveland, and Chicago, but much earlier in the South. Tropical Lilies make remarkable growth, and when well fertilized, bloom within a few weeks after planting, continuing to produce their enormous flowers until late in the fall. They may also be grown in a sunroom or conservatory pool, blooming the year around with the aid of occasional rations of bloodmeal poked under the soil. It is to be noted that young tropical Lilies have a tendency to become dormant if planted out in too cold, deep or shaded water; but if the plants are removed to a warm sunny location they usually start to grow again.

WINTER CARE. The best winter protection for the Lilies is to leave water in the pool and to cover the pool with boards and leaves or straw. Very little freezing takes place; roots and fish are safe and the pool walls cannot crack.

Under normal conditions hardy Water Lilies, Lotus and native aquatics winter in the ponds under water and seldom need protection unless the water gets very low, or if left in a pool which is drained, in which case a covering of leaves, straw, or manure should be provided. If the roots are planted in boxes, the boxes with the roots in may be taken out and covered in a trench, or taken into a cool basement and kept covered with moist burlap until spring. Dry rot is destructive to dormant roots and should be avoided by providing natural conditions of cold and moisture.

Tropical Lilies are best treated as annual plants, and replaced year after year. They must be kept in bloom all year in indoor pools but it is seldom worth while to try to preserve the tropicals unless a greenhouse pool is available.

WINTER CARE OF TUB GARDENS. Dip the water out of the tub; fill the tub heaping full of leaves. A few boards on top will hold the leaves in and help drain the water off. If the tub is not buried in the ground, heap leaves up all around it as well.

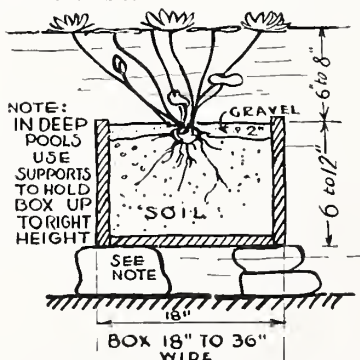
WINTER CARE OF POOLS. Pools may be left with the water in if the top is covered with boards and the entire pool heaped over with leaves or straw. Pools which cannot be covered should be drained unless they are heavily reinforced.

Keep the pool clear and clean by using scavengers. See page 44.

PESTS. How to avoid the problem of the increase of mosquito population is solved by the use of fish. The young larva, or the wiggler, which hatches from the egg of the mosquito is the favorite food of many of the interesting and beautiful fish desirable for pools and ponds.

The small black aphids which sometimes infest the leaves and stems of lilies above water should be washed off with the hose so that the fish can destroy them.

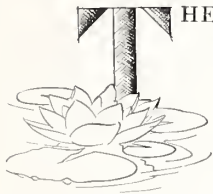
The small tropical fish which we describe on page 38 are all active insect enemies. They multiply rapidly in the pools and are easily kept over winter in small aquariums, where their interesting habits and flashing colors are a constant source of pleasure. For the winter care of fish see page 34.





HARDY WATER LILIES

Every Pool Should Have a Few



THE lovely blossoms of the hardy lilies may be seen just above the surface of the water or floating on it. The leaf stems adjust to the water's depth. If the water is lowered the bud stems twist to keep the bud under water until ready to open. Opening and closing takes one hour each and is an hour later

and earlier on the first day open.

Hardy lilies are equally at home in concrete pools, half barrels, or tubs; and with a little care to prevent actual freezing of the roots, their beauty and fragrance may be enjoyed year after year. Lack of experience will not interfere with results as water lilies "just grow" when provided with sunlight, rich soil, and warm shallow water.

We urge you to order early to avoid disappointment, if you want certain definite varieties of these fine plants. This class of lilies has become so much in demand it is difficult to maintain a constant supply of each variety throughout the season. If you order



Upper flower Marliac white. Lower flower Gladstone.

late in the season it would be well for you to indicate what may be substituted if the lily you want is already out of stock.

The Best Ten Hardy Water Lilies

You will particularly like these ten hardy water lilies we list here. Over a period of many years our customers have shown a decided preference for them. We attribute this continued popularity to their hardiness and freedom of bloom, as well as to their beauty of form and shading.

ATTRACTION. This is the largest hardy lily in cultivation, as it frequently produces blooms 8 inches across under favorable conditions of sunlight and soil. Its beauty of color is, however, its proudest boast. The petals are garnet red tipped with rose flecked white. Its sepals are almost white with faint rose streaks. As the blossom ages, the color becomes a rich, deep red with garnet-streaked sepals. Its stamens are of a rich mahogany tipped with yellow. No words can justly describe the splendor of this variety which should be in every garden. \$7.50.

CHROMATELLA. The clear, rich yellow of Chromatella makes it by far the best yellow variety grown. The broad petals are canary yellow, the stamens are of a deeper shade and altogether, this combination displayed among the leaves beautifully marbled in deep green and brown, make it a picture indeed. The sale of this variety justifies its reputation as it is by far the best seller we have. Fortunately the Chromatella propagates rapidly so that it continues to remain a moderate priced Nymphaea and the basis of several fine collections. (See colored illustration on page 9.). \$2.

COMANCHE. A comparatively new variety of such great beauty and so prolific in flower that it has quickly established its place among the ten favorites. You will find this flower of the changeable type, opening a rich apricot and then changing later to a deep coppery bronze that appears as a glowing red in the depths of the flower in contrast with the orange stamens. This flower is unique among the hardy lilies in that it proudly upholds itself well above the water surface like the tropical Nymphaeas, as if it were conscious of its own superiority. \$5.

GLADSTONE. This is the king of the white lilies. It surpasses all the other white Nymphaeas in size and freedom of bloom. It is a pure, dazzling white, 6 to 8 inches across, fairly sparkling in pure brilliancy. You'll find the petals broad and concave in pleasing contrast to the sulphur yellow of the stamens. The Gladstone springs from an exceedingly heavy root, and is a strong-grower. Other white lilies may equal this one, but you'll agree that none can surpass it. \$2.



Hardy Lily Comanche

New Introductions in Hardy Water Lilies—Page 10



THE BEST TEN HARDY WATER LILIES—Continued

GLORIOSA. A lily that is correctly named since it is so exceedingly glorious that we recommend it as the basis of every collection. Let us assure you that Gloriosa, without doubt, sets a standard among hardy lilies and beautiful flowers. Its blossom is a truly remarkable red and is often 6 to 7 inches across, perfect in form and rather double. Its perfume is similar to that of apple blossoms. It is thoroughly at home in pool or lake, and its characteristic small leaf-spread and large blossoms make an ideal plant for tub culture. Gloriosa is illustrated in color, page 4.

The excellent qualities persist in the cut flowers which continue to open for about five days when floated in bowls. This attractive feature of water lilies is often overlooked, though cutting the blooms stimulates their production just as it does in the case of many other plants. This brief description does not do justice to its superior excellence. According to many of our customers it "blooms and blooms, and is just lovely." \$5.

MORNING GLORY. The flowers of this type of lily were the inspiration for its name. Opening early in the morning, they are of glorious size and color and exquisite fragrance that is almost sublime. Flowers of this type bring perfect enjoyment to the garden. It is a beautiful *Nymphaea* of our own introduction. The color of the flower is a delicate shell and almost white at the petal tips, shading deeper toward the center of the flower. Such delicacy of shade and general perfection account for the great admiration bestowed upon this lily by all who know it. The long blooming season of Morning Glory, its flowers of lasting quality when cut, and its robust growth, give this lily a full rounded, unsurpassed perfection. \$3.50.

PINK OPAL. This lily has all the fine points of a beautiful flower. It has fine color, perfect shading and form. It is a



Marlicea rosea

N. M. albida

N. M. chromatella

COLLECTION

The Best Ten Hardy Water Lilies

One of each, value \$44

Special Group Price **\$35**

(Collection No. 3)

(For other aquatic plants to group with this collection see No. 22, page 27.)

new variety that has the excellence of flower and superior habit that determines the favorite. In color, it is a deep, rich pink. The buds are almost round and open into a flower of interesting form with comparatively short petals carried above the water. In addition to being a decided ornament to any pool, this flower has a substance which gives it distinct value for cutting. Pink Opal does splendidly in tubs. \$2.

ROSE AREY. This water lily is a plant of exceptional merit in every respect, attested by its being awarded a silver medal by the New York Horticultural Society. The flowers, a deep-cerise pink, sometimes reach 8 inches in diameter. The petals are pointed and have a noticeable curl that gives the effect of darker shading near the edges. We consider Rose Arey one of the best of the *Odorata* type; a delightful surprise awaits you. (See colored illustration on page 9.) \$3.

PAUL HARIOT. It is difficult to describe the beauty of this magnificent lily. The blooms are quite large, of lasting quality and are borne in abundance all season. The petals are clear yellow the first day, orange-pink the second day, and this deepens almost to a red on the following days. Flowers of different ages present an appearance quite unique and decidedly attractive. We class this *Nymphaea* with *Gloriosa* for general qualities of growth, freedom of bloom, color, and substance of petals. We are pleased to feature the Paul Harriot in color this year as we have a splendid supply on hand to meet the ever increasing demand for this popular lily. (Illustrated in tub on page 4.) \$4.

SULTAN. A lily which has magnificent, large cherry-red flowers. The petals are faintly tipped with white and shade in color to white flecked with red at the base. The sepals are white and have red lines. The red mahogany of the stamens enhances the beauty of this *Nymphaea* and we think Sultan is well worthy of a place among the best lilies. \$10.

The MARLIAC TRIO

(Collection No. 19)

This group contains three very fine hardy lilies of the true Marliac type. They are free blooming, fragrant and beautiful. Highly recommended for the small pool.

CHROMATELLA. The most popular of the yellows.

MARLIAC ROSE. Large and deep rose color.

MARLIAC WHITE. Large sparkling white flower.

This collection of three distinctive hardy lilies complete for **\$5**



THE RAINBOW COLLECTION of Glorious Colors

These five hardy varieties will make a gorgeous rainbow garden of water lilies. Any one of them makes a beautiful showing by itself, but when they are all planted together in this rainbow grouping, they offer a wonderful color display. Each lily is a gem in its particular class and color. Included in this collection—

1. **Morning Glory.** Delicate shell-pink.
2. **Gloriosa.** Large red; the finest red.
3. **Paul Hariot.** Chameleon orange-pink.
4. **Chromatella.** Deep yellow; the best yellow.
5. **Blue Beauty.** Deep blue flowers.

Collection No. 7, one each
of five varieties

\$12

It is easy to build a lily pool. Send for our booklet on pool construction.



HARDY LILIES

General List

We are listing for you here our selection of the twenty-one most desirable water lilies in cultivation, exclusive of the most popular ten varieties we have just named. These lilies have been chosen from several hundred varieties so we do not hesitate to recommend them as the finest obtainable.

AURORA. The development of this plant will interest you especially. The flowers are rosy-yellow on the first day, red-orange on the second, and deep red on the third. Its stamens are orange-red and the leaves are mottled with brownish-red. One of the best for the tub garden. \$2.

EUGENIA de LAND. This grand variety belongs to the N. odorata group, and is unequaled by any other of the same genus. The flowers are extra large, floating, and the petals are large and lanceolate. The flower's color is an exquisite shade of deep rose-pink of iridescent hues with yellow stamens. This is surely a vigorous and free-growing plant. It was awarded the silver medal by the Newport Horticultural society. (See illustration in color on page 8.) \$1.50.

HELEN FOWLER. An exquisite pink nymphaea of the Odorata type. The unusually fragrant flowers are borne above the water and are desirable for cutting. As the leaves are small, this variety is much used for tub culture. Certified by the Horticultural Society of New York. \$1.25.

HOPATCONG (Odorata Gigantea). This is a native of the southwestern states. It requires deeper water than usual and more room to spread than any other lily. It is excellent for naturalizing. The leaves are light red underneath and the flowers are very large and pure white in color. Fine for bold contrast. 75c; \$2 for 3; \$7.50 per doz.

INDIANA. This is perhaps the most variable of the Marliac series of changeable orange-pink hybrids. It opens a creamy yellow and shades through gleaming orange-bronze and fire-red to dark crimson on the fifth day, combining the beauty of the Aurora with the size and star shape of the Sioux. Suitable for tub culture. A hardy variety. \$3.

JAMES BRYDON. You will find this a superb variety, being a free-grower with rosy, crimson flowers that are 4 to 5 inches in diameter. Broad, massive petals form a double blossom that is decidedly cup-shaped. The leaves are a rich, dark red with bronze tints when in the sunlight. This lily is a delight to the eye. \$3.

LAYDEKERI PURPUREA. This variety has been very popular and we have a very good supply this year. The blooms are a rich amaranth-red, the sepals white, shading to rose-pink, and the stamens fiery red. \$2.50.

MARLIAC ROSE. It is sometimes difficult to select the best among so many pink lilies, but the Marliac Rose is distinctive and well worth while. The sepals and the flower center are a deep pink which shades imperceptibly to a delicate rose at the petal tips. This is one of the best lilies for cutting. Large, fragrant and lasting. It is highly pleasing. \$2.50.

MARLIAC WHITE. A vigorous variety, flowers large, of sparkling whiteness; stamens light yellow, sepals flushed pink; fragrant and produced freely and continuously through the season. Desirable and handsome. \$1.50.

MARY. A small pink lily that is especially suitable for the tub garden. A very popular small variety. \$1.

ODORATA MINOR. Fragrant white gem for tub culture. \$1.



Chromatella

ODORATA SULPHUREA GRANDIFLORA. A very popular fragrant yellow lily. \$2.50.

RED LAYDEKER (Laydekeri Fulgens). A new variety that promises to become very popular. The blooms are a rich amaranth-red; the sepals, white shading to a rose-pink. The stamens are fiery red. \$5.

RENE' GERARD. This is the queen of all hardy Nymphaeas. You will find the flowers are of exceptional size. A splendid new variety fully described on page 10. \$15.

ROSE MAGNOLIA. Flowers of an exquisite shade of pink. 4 to 5 inches across, standing well out of the water. \$1.

SIoux. A splendid lily whose flowers are a rich coppery yellow; they change in shade to amber-red as the flower ages. Decidedly star-shaped; second only to the Comanche. \$3.

SOLFATARE. A new hybrid similar to the Paul Harriot but in softer shades. Opens a rich cream color shading to yellow at center, and deepens over several days to a pink with a distinct overtone of gleaming brass in place of the more familiar bronze or copper tints. Suitable for the tub garden and very free blooming. Leaves green above, dotted with red on the under side. \$3.

VERA LOUISE. This has a flower we have long sought; a free-blooming white lily comparable in quality to the finest colored Marliacs. Apparently, the Vera Louise is a cross between Gladstone and Marliac Rose. It has the broad white petals and cup-shaped flowers of the former and the red brown sepals with inner flesh tints of the latter. Hardy. \$3.50.

VESUVE. It is remarkable to find such a bright, dark red as is revealed in the petals of the flower. The stamens are red, tipped with yellow, giving the flower as a whole a decided individuality. Second only to Gloriosa in free flowering. \$5.

W. B. SHAW. Flowers large, of rich rose-pink and very fragrant. A strong grower and continuous bloomer of N. Odorata type. \$1.25.

YELLOW PYGMY. A tiny lily that is ideal for tub culture. Flowers from one to two inches across are a rich golden yellow. Leaves are pleasingly mottled and flecked with chocolate. \$1.



HARDY LILIES

for the Collector

In addition to the water lilies in this catalog we have a great many rare and unusual varieties of special interest to the connoisseur. We can supply all known types of lilies to those interested in collecting these rare varieties.

Complete Tub Garden Collection furnished with any Water Lily for \$3.50 Extra.



THE SACRED LOTUS OR NELUMBBIUM

Fine to Plant with Lilies

See Color Illustration, Page 24

THE spell of the Nile still hovers around the blossoms of the Sacred Lotus even when this strikingly beautiful plant is grown in our twentieth century gardens.

Four thousand years ago in the sacred gardens of Egypt, where dwelt the priests and where the people came to worship, there were pools of granite porphyry in which the Sacred Lotus grew, dedicated to the ancient deities. The Lotus, springing from the mud, lifting its golden-headed blossoms high over the water and opening pure and spotless to the sun, was symbolic of the rise of the soul of man.

There is perfect beauty in the leaf, bud and opened flower of the Lotus. The great concave, shield-like leaves, often 2 feet in diameter, and many petaled flowers, like gigantic roses with delightful fragrance, form a striking picture of great artistic quality. The brown seed pods, remaining after the flowers have blown, are alone decorative to the point of making this plant worthy of a place in the water garden. No plants appeal more to one's fancy than the Lotus with its thousands of associations.

We list here the same varieties of Lotus that grew in those Egyptian gardens, as well as several interesting new varieties and collections.

AMERICAN LOTUS (*Nelumbium Lutea*). The perfect yellow flowers of this variety attain a diameter of 8 to 10 inches. Sometimes this is known as the Water Chinquapin, especially in those parts of the country where it grows in the wild. Tubers, \$2; potted plants, \$3; 3 for the price of 2.



The Lotus is a plant of exquisite beauty and oriental charm.



The Mystic Trio

One each of the pink, white and yellow Lotus.

Value \$6.50.

Special group price.... \$5

(Collection No. 4A)

CHINESE RED LOTUS (*Pekinensis Rubrum Plenum*). This lovely Lotus has very large flowers of bright rosy carmine color. The flowers are very double and are borne on strong stems well above the foliage. The growth of plant and leaves is magnificent. It flowers freely and is very desirable. Tubers \$3.50; potted plants, \$4.50.

EGYPTIAN LOTUS (*Nelumbium Speciosum*). This is the true flower of the Egyptians and possesses a strange haunting fragrance. Originated in India and taken to Egypt to become a sacred flower. The blossoms are an attractive pink. An excellent variety that grows very hardy and freely in the latitude of Cleveland. Tubers, \$2; potted plants \$3; 3 for the price of 2.

FLAVESCENS. All of the *Nelumbiums* (Lotus) are so strikingly beautiful it is difficult to select one variety more beautiful than the others. However, *Flavescens* is a most welcome newcomer that has pleasing cream-colored flowers. It is very free blooming. \$3.50 for tubers; \$4.50 for potted plants.

JAPANESE LOTUS (*Album Grandiflorum* or *Magnolia*). A splendid white Lotus of gorgeous beauty. The flower is a fine, pure white of large size and delicate fragrance. The leaves are large and deep green color. This is one of the best white Lotus. \$2 for tubers; \$3 for potted plants.

ALBUM STRIATUM. A striking variation of the Japanese Lotus that makes a splendid new introduction. Its large white flowers are very fragrant. The white petals are tipped, edged and faintly striped with rosy carmine. Unusually large and attractive blossoms. \$5 for tubers; \$6 for potted plants.

PEKINESE ROSE. The counterpart of the Shiroman in beautiful shades of soft pink. This exquisite lily resembles a double rose of gigantic proportions. A good bloomer. \$3.50 for tubers; \$4.50 for potted plants.

SHIROMAN. This is the rare and beautiful double white Lotus and has magnificent, large flowers massed with petals. On first opening, the flowers are cream with a few of the petals tinted light green, which later fades to pure white as the flower gets older. Often the blooms are a foot in diameter. This is a strong, robust plant which flowers very freely. The blossoms will last well in the cut state. \$3.50 for tubers; \$4.50 for potted plants.

Interesting Books

A true water gardener will wish to know more about the plants and fish he finds attractive. Realizing that this booklet is but an introduction to a fascinating hobby, we are glad to recommend the following books which have been written by the foremost authorities in this country, and which we can supply.

THE WATER GARDEN, by Peter Bisset, is an excellent work dealing with the culture of water lilies and other aquatic plants, as well as the arrangement of perennials, shrubs, and evergreens for the borders and backgrounds of pools. 210 pages of interesting text profusely illustrated. \$5 a copy.

BOOKS ON FISHES. See page 34 for interesting books which will be of great help in succeeding with fishes.

See Egyptian Water Garden Collection on Page 24



EGYPTIAN WATER GARDEN - \$7.50

Complete as
Illustrated

Three classic flowers that flourished in the Valley of the Nile, and enough modernized and improved varieties of aquatic plants to give the flowers an appropriate setting. (Note: the varieties may be identified in the illustration below by the initial letters.)

- (H) Sacred Lotus of the Nile (*Nelumbium Speciosum*). The pink Egyptian Lotus.
- (I) *Nymphaea Blue Beauty*. Improved form of the tropical water lily known to the ancients as the Blue Lotus of the Nile.
- (K) *Nymphaea Juno*. The modern *Dentata Superba*, or Egyptian white lily.
- (A) 1 Papyrus, or Egyptian Paper Plant.
- (B) 2 Cattail. A favorite water plant.
- (C) 2 Flowering Bulrush. Pink flowers.
- (D) 2 Arrowhead. Has distinctive leaves.
- (E) 2 Pickerel Rush. Blue flowers.
- (G) 1 Velvet Leaf. Straw-colored flowers.
- (J) 2 Water Poppy. Yellow flowers.
- (L) 1 Water Hyacinth. Blue flowers.
- (M) 1 Shell Flower. Floating plant.
- 3 Anacharis. Oxygenating plant.

This collection is ideal for the small pool.
Complete for **\$7.50**

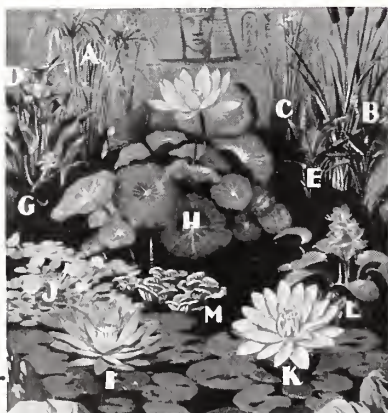
(Collection No. 5)



HOW TO ARRANGE THE PLANTS

The arrangement of plants shown in this illustration is for a small rectangular or crescent shaped pool, and is particularly suitable for a pool that has a background of a wall or high-growing plants. Please note that the tall growing varieties are placed at the back against this background. This illustration shows how easy it is to group these plants attractively in a small pool.

If your pool is located in an open space so you can walk all around it, a most pleasing arrangement of the Egyptian Water Garden is as follows: All the tall-growing plants, A, B, C, D, E, and G would be planted in one large container in the center. The Lotus and Water Lilies would each be planted in a separate container and be grouped around the centerpiece. This arrangement is suitable for any shaped pool and forms the loveliest pool imaginable.





WATER LILY COLLECTIONS

New Color Combinations—Splendid Values



RICKER'S famous collections provide you with an easy, practical way to have an attractive, harmonious water garden. You will notice that they are of the finest varieties described on the preceding pages. Arranged to give the most pleasing results at the least expense, our collections will be as attractive to you as they have been for years to our regular customers.

Many other combinations than those listed here may suggest themselves to the experienced water gardener, and we are always interested in having new ones described or photographed in order that we may list them next year for the pleasure of other customers.

For your information, a pool 4 by 6 feet in size will accommodate three water lilies and a small collection of aquatics. These are minimum figures and in most cases larger pools will give better results. There

are so many types of lesser aquatic plants that we have purposely made the collections general, but we can usually include any particular varieties that may be desired. See page 4 for the tub collections.

Tub Garden Collections

Everything for the complete tub garden. See page 4.

Five Night Bloomers, \$7.50

(Collection No. 1)

A special group of the five finest Night Blooming Lilies. See page 14.

Seven Day Bloomers, \$15

(Collection No. 2)

A combination of the most popular day bloomers. See page 15.

Best Ten Hardy Lilies, \$35

(Collection No. 3)

This includes the hardest and most desirable varieties. See page 20.

The Mystic Trio, \$5

(Collection No. 4A)

A special group of three Lotus, one each of pink, white, and yellow. See page 23.

Egyptian Water Garden, \$7.50

(Collection No. 5)

Three classic flowers that flourished in the Valley of the Nile, and other water plants. A complete planting for the pool. See page 24.

Pastel Shades of Beauty, \$7.50

(Collection No. 6)

A most beautiful combination of soft colors. The varieties offered in this trio namely, General Pershing, August Koch and Marliac Chromatella, were the results of the efforts of the three great hybridizers, Pring, Koch and Marliac. See picture of Chromatella, page 9.

Rainbow Collection, \$12

(Collection No. 7)

Our most popular collection. A quintette of the choicest and most exquisite of the Lilies. The various color types are represented in this collection. See page 21 for picture and description.

Popular Trio, \$3

(Collection No. 8)

Three fine hardy lilies—Hopatcong, white; Helen Fowler, pink; Chromatella, yellow. Sure to please you.

Bouquet of Fragrance

(Collection No. 9)

Here are three of the most fragrant of the water lilies. Collection includes Dauben, blue; Pink Opal, pink; Hopatcong, white.

Collection DeLuxe, \$20

(Collection No. 10)

A combination that is truly "De Luxe," including the choicest water lilies grown. These are standard varieties chosen from among the most popular. The finest seven (value \$29).

ATTRACTION. Large dark red.
COMANCHE. Bronze and crimson.
MORNING GLORY. Beautiful shell pink.
CHROMATELLA. Deep yellow.
JUNO. Large 18-hour white.
MRS. ED. WHITAKER. Gigantic blue.
GENERAL PERSHING. New deep pink.

Gems of Color, \$5

(Collection No. 11)

These lilies are indeed gems of color. However, delicacy of shading is but one of the many points of their excellence.

CHROMATELLA. The most popular of the yellows.
PINK OPAL. Lovely rich pink.
BLUE BEAUTY. Immense flowers of rare deep blue.

Independence Trio, \$5

(Collection No. 12)

This collection will give you 24 hours of beautiful blossoms every day.

RUBRA ROSEA. Deep red; night-blooming.
JUNO. An Egyptian white; night-blooming.
AUGUST KOCH. Wisteria-violet; day-blooming.

Chromatic Harmony, \$7.50

(Collection No. 201)

A collection of unusual and delightfully interesting colors. All of the plants harmonize to make a most colorful water garden.

AURORA. Molten bronze.
PINK OPAL. Glowing rose.
JUPITER. Navy blue and royal purple.
CHROMATELLA. Golden yellow.
MARLIAC WHITE. Lustre of pearl.



WATER LILY COLLECTIONS

Hoosier Trio, \$5

(Collection No. 13A)

Three very pleasing water lilies that will be popular as a collection. The Indiana is one of our newest varieties.

INDIANA. Changeable. Copper-bronze.

PENNSYLVANIA. Blue. Very popular.

HOPATCONG. Fragrant white.

Night Blooming Collection, \$3

(Collection No. 14)

A special collection of three wonderful night bloomers that will fascinate you with their beauty, fragrance and mystery. This will please particularly after the day bloomers have closed. One plant each of red, white and pink (3 plants) of night bloomers, our selection of varieties.

Classic Trio, \$8.50

(Collection No. 15)

Another grouping of the most popular varieties. The flowers are large and of the finest colors.

MRS. PRING. Pure white.

GENERAL PERSHING. Deep pink.

MRS. WHITAKER. Gigantic blue.

Quality Trio, \$7

(Collection No. 16)

This collection is less than the Rainbow collection in numbers only. You will find in this group three of the finest hardy lilies. Catalog price \$8.50.

GLORIOSA. Large, dark red; Unique cup-shape.

PINK OPAL. Deep, rich pink; perfect form and shading.

CHROMATELLA. The finest yellow.

1930 Special, \$5

(Collection No. 17)

These are all standard varieties of day and night blooming varieties and because we have an excellent stock of them we are able to offer these at a very low "Collection price." An effective color-grouping of full-petaled flowers of perfect form and shape.

CAPENSIS. Rich sky blue.

ZANZIBARIENSIS ROSEA. Delightful pink.

DENTATA. Gorgeous white night-bloomer.

RUBRA ROSEA. Rosy carmine; star-shaped.

DAUBEN. Small, light blue flowers in profusion.

Saddle River Trio, \$5

(Collection No. 18)

Here are three of the most popular of the day bloomers. For form, for color and for production of exquisite flowers in great abundance, these varieties are unexcelled.

MRS. WARD. Deep rose-pink. Profuse bloomer.

MRS. PRING. Stately pure white.

PENNSYLVANIA. A rich deep blue. Favorite of all.

Marliac Trio, \$5

(Collection No. 19)

This group contains three very fine hardy lilies of the true Marliac type. They are free blooming, fragrant and beautiful. (See colored illustration on page 20.)

CHROMATELLA. The most popular yellow.

MARLIAC ROSE. Large and a deep rose color.

MARLIAC WHITE. Large sparkling white flower.

Surprise Collection, \$3.50

(Collection No. 20)

A trio of high grade standard varieties, the identity of which is uncertain due to lost or defaced labels. The colors range from the deepest blue to creamy white and pale pink. You will indeed be pleasantly surprised with the results from these plants.

Freckles Trio, \$7.50

(Collection No. 206)

An unusual collection in that all three varieties have mottled or "freckled" leaves.

KEW. Delicate pink; night-blooming.

MARMARATA. Lavender-blue; day-blooming.

MRS. PRING. Pure white; day-blooming.

The Ganges Trio, \$4.50

(Collection No. 205)

This group brings to your pool the magnificent glory of the Orient. Three harmonious beauties.

FRANK TRELEASE. Rich dark crimson.

CAERULEA. Sparkling blue.

CHROMATELLA. Canary yellow.



This attractive water garden was developed by Mr. J. Lee Laughlin, 1419 Wendell Ave., Lino O. Where could one find a spot more enjoyable than one such as this?



AQUATIC PLANT COLLECTIONS

NO water lilies are included in these collections which are made up entirely of aquatic plants. These collections are suitable for use in pools where at least three or five lilies may be grown.

Small Pool Collection, \$3

(Collection No. 21)

Twenty plants in 10 or more varieties, our selection, suitable for a pool 4 x 6 feet or larger. A group particularly adaptable for use with the following collections: Mystic Trio, Pastel, Popular, Fragrance, Gems, Independence, Hoosier, Night Blooming, Quality, Saddle River, Marliac, Surprise. Collection includes:

- 4 shallow water plants for centerpiece.
- 12 plants for corners or sides of pool.
- 2 Oxygenating plants.
- 2 Floating plants.

Medium-Sized Pool Collection \$5

(Collection No. 22)

Thirty-five aquatic plants in 16 or more varieties suitable for a medium-sized pool, 7 x 10 feet or larger, with five or more water lilies. Particularly suitable for use with the following collections: Rainbow, 1930 Special, and Chromatic Harmony. Collection includes:

- 9 Shallow water or bog plants for centerpiece.
- 16 Corner or side plants.
- 5 Oxygenating plants.
- 5 Floating plants.

(Collections No. 23A and 23B)

Five Floating Plants, 5 varieties \$1. 10 plants \$2. See page 30.

(Collections No. 24A and 24B)

Oxygenating Plant collection for a small pool, 20 plants \$2. 60 plants \$5. See page 30.

(Collections No. 25A and 25B)

Shallow Water collection, 5 plants \$1; 12 plants \$2. See page 31.

(Collections No. 26A and 26B)

Marsh or Bog Plant collection, 5 varieties \$1.50; 10 varieties, \$2.50. See page 32.

(Collection No. 27)

Hardy Fern Collection, 10 Ferns, \$3.50. See page 32.

(Collections No. 28, 29A and 29B)

Perennials and Rock Plants. See page 33.

(Collections No. 35A, 35B and 35C)

Aquarium Plant collections, see page 46.

Fishes and Supplies

Combination Fish Collection, \$5

(Collection No. 30E)

- 6 Common Goldfish.
- 6 Calico or Gingham Fish.
- Scavenger Collection 34A which includes 6 each of Tadpoles, Jap Snails, Ramshorn Snails, 2 Clams and a pair of Aquarium Salamanders.

Collections of Goldfish. See page 35.

Collections of Tropical Fish. See page 43.

GIANT GOLDFISH. A foot long \$5 per pair; \$25 per dozen.



Pickerel Weed in Back, Jussiaea Repens in Center, Parrot Feather in Foreground, All Desirable Aquatics.

JAPANESE SNAILS. Scavengers that keep the pool clean. \$2 per dozen.

DRIED SHRIMP FOOD. For all fish and scavengers. Small tins, 20c; \$1 per lb., \$5 for 6 lbs.

PRAEFECTA. A complete food for all aquatic plants. Developed in our laboratories and designed to produce maximum flower production in the lily pool. Mix with any soil for planting or use as a stimulant late in the season. Pint carton for tub garden, 50c; quart carton for 3 to 4 lily boxes, \$1.

CLAMS. A good remedy for cloudy water. \$2 per dozen.

Scavenger Collection

(Collection No. 34A)

Collection of Scavengers to keep the pool clean. \$2. See page 44.

Letters From Water Gardeners

"LILY POOL IS A PLEASURE TO ALL"

January 14, 1929.

Gentlemen:

I built our lily pool last May and never have I done anything about the garden that has given so much pleasure to all and every one of us. Every day we found something new to delight in—first our marginal plants, then the first bud on the Lilies, then the blossoms, the Water Poppies, Hyacinths, Snowflakes and Arrowhead—continually something to wonder at and admire. As soon as I have my winter pleasure of selecting and re-selecting my stock for next summer you will surely get another order.

Very truly yours,
George C. Marx, Chicago, Ill.

"WATER LILIES GROWING BEAUTIFULLY"

September 19, 1928.

Gentlemen:

The fish and water lilies which we ordered from you are all growing beautifully and have made our pond a neighborhood interest. All the lilies bloom regularly and continue to throw out bud after bud. We are well satisfied with our pond and want you to know we appreciate the plants and fish ordered from you.

Yours very truly,
Jacob C. Fischer, Princeton, N. J.



COMPLETE POOL COLLECTIONS

Complete Collection for Small Pool \$10

Here is a balanced grouping for a small pool 4 x 6 feet or 5 x 7 feet. Everything you need for an attractive planting is included. The bird's eye view illustration on the right shows how to arrange this collection in the pool and gives an idea of the effect one will gain. The collection includes the following:

Note: The letters identify the position of the plants in the illustration. Numbers refer to collection numbers.

LILIES

(A) 3 Lilies. Gems of Color, Collection No. 11\$5

AQUATIC PLANTS

Collection No. 21; our selection of varieties, but each collection shall include:

(B) 4 Shallow Water Plants such as Papyrus, Pickerel Rush and Arrowhead for centerpiece.

(C) 12 Aquatic Plants such as Taro, Forget-Me-Not, Primrose Creeper, Spiral Palm, Flag, etc., for corners of pool.

(D) 2 Floating Plants.
2 Oxygenating Plants.

A total of 20 Aquatic Plants.....\$3

ORNAMENTAL FISHES AND SCAVENGERS

Collection No. 30E which shall include:

12 Common Goldfish.
2 Calico Fish.

Scavenger Collection No. 34A.
Total collection 30E.....\$5

1 carton Praefecta, our new fertilizer.....\$1

Total Catalog Price.....\$14

Complete collection for small pool,
Collection No. 38, special\$10



Bird's eye view of attractive planting arrangement for plants included in complete collection for small pool, Collection No. 38. This grouping may be easily adapted to the round or oval pool.

Complete Collection for Medium Sized Pool \$17.50

We have illustrated below a pleasing planting arrangement for a medium sized pool. This collection includes everything needed to completely plant and stock a rectangular pool 6 x 6 feet, or a round pool 7 or 8 feet across.

The following items are included in this collection:

Note: The letters identify the position of the plants in the illustration. Numbers refer to collection numbers.

LILIES

(A) 4 Lilies. Pastel Shades Trio, Collection No. 6, and Juno (\$3). Total value.....\$10.50

AQUATIC PLANTS

Varieties B, C and D, same as listed in small pool collection.
A total of 20 aquatic plants\$3

ORNAMENTAL FISHES AND SCAVENGERS

Pair of Young Giants\$ 2.50

Six Calico Fish.... 3

Scavenger Collection 34A 2

1 carton Praefecta, our new fertilizer 1

Catalog Price.....\$22.00

This complete collection for medium sized pool,

Collection No. \$17.50
39, for



This drawing illustrates a pleasing arrangement for the plants offered in collection for medium sized pool, Collection No. 39. This grouping may be easily adapted to the rectangular pool.

These easy-to-order collections make it simple to have a harmonious pool.



Complete Collection for Popular Sized Pool \$25

We are beginning to realize that since we grow only the best varieties of water lilies, it is hard to show any preference when it comes to putting them in a catalog. The result is that people read the catalog and write in to ask us what to put in the pool. A lot of you customers will recognize the answer we give: "A pool 7 x 9 feet, 8 x 12 feet, or 12 feet across, will accommodate 5 or 6 water lilies, a number of aquatics, etc., and here is what we recommend:"

5 Lilies, Rainbow Collection illustrated on page 21.....	\$12
Aquatic Plant Collection No. 22.....	5
2 pair Young Giant Goldfish.....	5
12 Calico Fish (Japanese Shubunkins).....	5
Scavenger Collection No. 34A.....	2
1 carton of our new fertilizer, Praefecta.....	1

Catalog Price\$30

Everything you need for the popular sized pool, **\$25**
Collection No. 37, complete for

Complete Collection for Large Sized Pool \$40

The large size pool (about 10 by 15 feet) will accommodate several varieties of water lilies and aquatics. Selections made to include each type of plants in their proper proportion will provide for a complete and harmonious water garden. In order to provide a guide for the selection and arrangement of plants for the large pool we herewith show a planting plan with list of plants and miscellaneous items included. This is an ideal arrangement and easy to follow.

While the plan is drawn for a formal pool, the suggestions for planting are equally suited for informal pools irregular in outline. If your pool is considerably smaller, it is easy to adapt this plan to it by simply cutting down the quantities.

Note: Numbers refer to collection numbers.

LILIES

8 Lilies. Collection No. 201 and No. 15.

AQUATIC PLANTS

For Centerpiece: Delta Collection of Egyptian Lotus and Papyrus, No. 34B.

For Sides and Corners: 35 Aquatics, Collection No. 22.

FISHES AND SUPPLIES

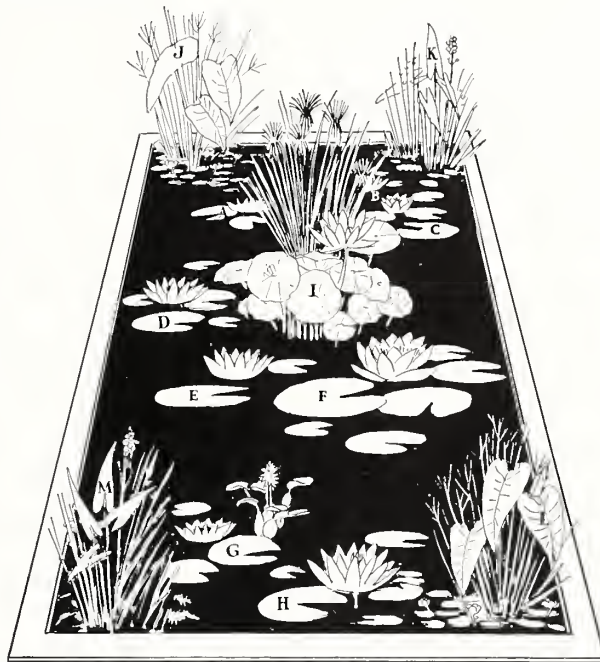
6 Young Giant Goldfish.

1 dozen Calico Fish.

Scavenger Collection No. 34B.

1 carton of Praefecta, our new fertilizer.

Complete collection of everything in this list for **\$40**
pool 10 x 15 feet, Collection No. 36, for.....



Follow This Plan—It Is Easy

The arrangement illustrated above, is based on the \$40 pool collection. You may make up your own collection if you wish. The key letters used identify the location of the plants on the plan.

WATER LILIES A TO H

8 Lilies, as listed in \$40 collection, No. 36; any arrangement is suitable.

CENTERPIECE I

3 Lotus planted in tub or large box arranged about 3 Papyrus grouped in 6 to 8 inch pots set in the center.

CORNER GROUPS J, K, L, AND M

The Aquatic Plants for these corners should be planted in tubs, pails or boxes set within 1 to 3 inches of water surface.

Corners J and M (each) 1 Taro, 2 Spiral Palm, 2 Parrot Feather, 3 Water Poppy. (These or similar varieties are included in collection No. 22).

Corners K and L (each) 1 Flowering Rush or Primrose Willow, 2 Pickerel Rush or Giant Arrow, 2 Forget-Me-Not, 3 Floating Heart. (These or similar varieties are included in collection No. 22).

FLOATING PLANTS

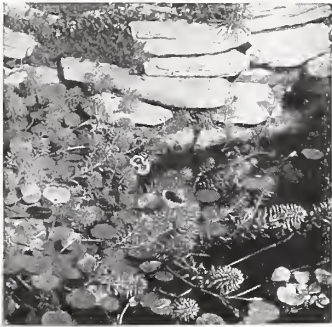
Set these plants in anywhere, for they will soon float in their own pleasing arrangement. In collection No. 22 there will be Shell Flower, Water Hyacinth and a portion of Salvinia.

OXYGENATING PLANTS

Plant these in container with Lilies and Lotus or in separate containers with the soil 6 to 12 inches under the water. These plants will be included in collection No. 22.



OTHER PLANTS NEEDED in the Aquatic Garden



Water Poppy and Parrot Feather

THE water lily is the queen of water flowers and like a queen should be given harmonious surroundings. Other aquatics are needed to make up the royal procession, where their color, form, and grace will enrich the setting and contribute to the spirit of the garden. Plan to make the garden of your dreams complete by having in it some of these other subjects so necessary to finish the picture. We list them by groups and offer suitable collections in every case to help you choose fitting companions to your lilies.



Shell Flower and Snowflake

FLOATING PLANTS



First we think of the surface of the pool. Perhaps the water is deep and the sides offer no lodging for rooted plants. This does not matter, however, for some of the finest aquatics will grow and bloom merely floating on the surface, deriving nourishment from the air and water. In nature they drift to shallow water where the roots soon anchor and growth is very rapid. In other words, Floating Aquatics are always at home in any pool.

AZOLLA (*Azolla Caroliniana*). Small crinkly, green plants resembling floating leaves of arborvitae. Autumn sunlight turns Azolla a deep red. Large portion, 50c

DUCK WEED (*Lemna Minor*). Appears as a series of green polka dots on the surface. The small roots are much appreciated by goldfish. Hardy. Large portion, 50c.

SALVINIA (*Salvinia Braziliensis*). Dainty leaves of soft green, covered with a velvety nap of tiny hairs. The growth forms an attractive chain of these leaves which are about 1/4 inch in diameter. Popular as an aquarium plant. Large portion, 50c.

WATER FERN (*Ceratopteris thalictroides*). Though an aquatic species of the fern family, the leaves greatly resemble garden lettuce. Numerous small plants spring from the edges of the leaves, gradually building up a floating mass of some size. The new plants may be detached and grow to some 6 inches in diameter before starting to propagate. 50c for 3; \$1.50 per doz.

SHELL FLOWER OR WATER LETTUCE (*Pistia stratiotes*). A rosette of fluted blue-green velvety leaves. Grows best in a shady pool. 50c for 2; \$2 per doz.

WATER HYACINTH (*Eichhornia crassipes major*). Shiny dark green leaves, the stems of which are expanded into pseudo bulbs, which serve as air chambers. The orchid-like flowers of lavender form a spike like that of the true hyacinth. Propagation is by means of runners at the surface, and the growth is so rapid that navigation is hindered in streams in the southern states where they grow profusely. It is, perhaps, fortunate that the plant is destroyed by frost. The long, bushy roots are excellent for receiving the spawn of goldfish; therefore, the Water Hyacinth may be used to advantage in pools of fair size. 50c for 3; \$1.50 per doz.

COLLECTIONS

Floating Plants

Five Varieties for a Small Pool, \$1 No. 23A

Ten Plants in Seven Varieties, \$2, No. 23B

Oxygenating Plants

For Small Pool, 20 Plants (5 varieties), \$2, No. 24A

For Large Pool, 60 plants (5 varieties), \$5, No. 24B

WATER CHESTNUT (*Trapa natans*). A hardy annual resembling the water fern in form but with mottled leaves and small white flowers. The large seeds are spiked and armoured for protection while wintering at the bottom of the pond. Shipped only after June first. \$1 for 2; \$5 per doz.

WATER SNOWFLAKE (*Nymphoides Indicum*). A lily-like plant, the detachable leaves of which form new plants covered with dainty white flowers fringed like a giant snowflake. Shipped as floating leaf which soon sends down roots in shallow water. \$1 for 3; \$3 per doz.

SUBMERGED or OXYGENATING PLANTS

Whatever the size or style of the pool, you will wish the water to be pure and clear. Plants growing under water either absorb the impurities or release oxygen to destroy them. Oxygenating plants are indispensable when fish are present as they provide a perfect balance for the animal life. This is more fully discussed under the heading of Plants for Aquariums.

The plants listed below are equally suited for ponds, pools or indoor aquariums. The first five will grow without planting, but all do better if rooted in soil, in shallow water or in the lily boxes. (See page 45 for descriptions.)

Plant same in containers with lilies and lotus or in separate containers with the soil 6 to 12 inches under water.

ANACHARIS (*Elodea Canadensis*). \$2 per doz.

CABOMBA (Fanwort). \$1.50 per doz.

COON TAIL (*Ceratophyllum*). \$1.50 per doz.

MYRIOPHYLLUM (Milfoil). \$1.50 per doz.

MONEYWORT (*Lysimachia*). \$1.50 per doz.

LUDWIGIA (Loosestrife). \$1.50 per doz.

POTAMOGETON (Curly Leaf). \$1.50 per doz.

SAGITTARIA (Broadleaf). 50c for 3; \$1.50 per doz.

SOUTHERN SPATTERDOCK (*Nuphar sagittifolia*). \$1.50 per doz.

VALLISNERIA (Tape grass). 75c per doz.; \$5 per 100.

Complete Collections with Planting Plans for any size pool, Pages 28 and 29.



SHALLOW WATER PLANTS



NATURAL ponds will have an area of shallow water where a profusion of flags, rushes, reeds and small flowering plants delight the eye. Your pool will be the more attractive when provided with a place where water, two to eight inches deep, will support the same growth for a center piece, corner ornaments, or an aquatic flower border.

ARROWHEAD, DOUBLE FLOWERING (*Sagittaria japonica* Fl. Pl.). Very desirable for planting in tubs or on margins of ponds and streams. See page 11. \$1 each or \$10 per doz.

ARROWHEAD, GIANT (*Sagittaria sagittifolia*). Distinctive leaves shaped as name indicates and standing 1 to 3 feet above water. Flowers freely in a series of white spikes. Hardy. \$1 for 3; \$2.50 per doz.

BOGBEAN (*Menyanthes trifoliata*). A perennial aquatic with creeping root stocks in shallow water. Its fragrant white flowers are borne on stout stalks, fringed and suffused with pink. 50c for 3; \$1.50 per doz.

COMMON CAT-TAIL (*Typha latifolia*). One of the favorite native swamp plants. Hardy. 50c for 3; \$1.50 per doz.

GRACEFUL CAT-TAIL (*Typha Angustifolia*). A tall variety with slender cat-tails more completely developed than the usual type, giving the appearance of being double on the stem. These plants furnish a very fine background in massed plantings. 50c for 2; \$2 per doz.

FLOATING HEART (*Nymphoides peltatum*). This plant has leaves like the nymphaeas and produces brilliant yellow flowers quite freely. It is hardy and will do well in water or on the border. 50c for 3; \$1.50 per doz.

FLOWERING RUSH (*Butomus umbellata*). A hardy plant with peculiar three-sided leaves in graceful clumps. Attractive pink flowers are borne on round stems. Fine for naturalizing in a pond. Hardy. \$1 for 3; \$2.50 per doz.

FORGET-ME-NOT. See Bog Plants, page 32.

PARROT FEATHER (*Myriophyllum proserpinacoides*). Quite successful when planted in a tub or water-tight hanging basket. The growth soon goes over the edges in the form of long trailing stems. Extremely valuable for trailing over a fountain. Hardy. 50c for 3; \$1.50 per doz.

PICKEREL RUSH (*Pontederia cordata*). The blue flowers of this plant have made many friends, particularly as they are produced freely. The total growth is about 2 feet. Hardy. 50c for 2; \$2.50 per doz.

PRIMROSE CREEPER (*Jussiaea Repens*). A rapid growing partially submerged vine with waxy green leaves and a profusion of bright, yellow flowers. Thrives in sun or shade. Hardy. 50c for 3; \$1.50 per doz.

SPIDER LILY (*Hymenocallis Caribaea*). A native plant of the West Indies that produces clusters of fragrant white flowers. The petals are narrow and curving and give the plant a characteristic spider-like appearance. \$1 for 2; \$5 a doz.

VARIEGATED SWEET FLAG (*Acorus Calamus* Var.). A fine hardy plant with saber-like leaves broadly striped green and ivory. Grows about two feet high and is excellent for group planting. \$1 for 3; \$2.50 per doz.

DWARF SWEET FLAG (*Acorus Gramineus* Var.). A miniature flag 6 to 10 inches high with green and white stripes. Fine for small pools or tub gardens. \$1 for 3; \$2.50 per doz.

VELVET LEAF (*Limncharis Flava*). An erect-growing plant, standing 1 to 2 feet out of water, with elliptical leaves 4 to 6 inches long of velvety green. Flowers straw color. \$1 for 2.

WATER AMARYLLIS (*Crinum Americanum*). An ideal tropical marsh plant which produces white bell flowers in umbels of six or eight. It is also available in shades of pink but the colored varieties prefer dry soil. Very suitable for corners of a small pool. \$1 for two plants.

WATER ARUM (*Peltandra Virginica*). A hardy aquatic with graceful, spear-like leaves and calla lily flowers. \$1 for 3; \$2.50 per doz.

COLLECTIONS

Shallow Water Plants

5 Shallow Water Plants, \$1, No. 25A

12 Shallow Water Plants, \$2, No. 25B

(Collection No. 25 A and B)

FOUR LEAF WATER CLOVER (*Marsilia Quadrifolia*). A four leaf clover which forms a mosaic pattern on the surface and in crowded spots. Sends up a luxurious growth of aerial leaves. Hardy. 50c for 3; \$1.50 per doz.

PURPLE WATER HYACINTH (*Eichhornia azurea*). A creeping plant without the floating bulbs of the ordinary Water Hyacinth but with more handsome blooms. \$1 for 2; \$5 per doz.

WATER NASTURTIUM or **WATER CRESS**. Thrives in sun or shade; ideal near a cold spring. Edible. Hardy. Rooted plants, \$1 per doz.

WATER PLANTAIN. A border plant with heart-shaped leaves standing about a foot above the water and surmounted by tall branching spikes of white flowers. Hardy. \$1 for 3; \$2.50 per doz.

WATER POPPY (*Hydrocleis nymphoides*). The leaves float upon the surface of the water. Flowers are large and yellow, similar to the poppy. It is in flower almost continuously. 50c for 3; \$1.50 per doz.

WILD CALLA (*Calla Palustris*). This is like a calla lily, but much smaller in size. A desirable plant for shallow water. Hardy. 50c for 3; \$1.50 per doz.

WILD RICE (*Zizania aquatica*). The importance of Wild Rice as a food for water-fowls cannot be over-emphasized. It is easily grown in shallow water and is decidedly ornamental, as it shoots up rapidly and makes a growth of 5 to 10 feet. Panicles of bloom make it additionally delightful. Should be planted in every pond. \$1 per doz.; \$6.50 per 100.

Photographs

We shall be very glad to have submitted to us photographs of pools, ponds, or tubs that would be suitable for illustrations either in catalogs or other advertising matter. We shall be pleased to present the sender of a photograph sufficiently attractive for this purpose with one of the finest blue or pink Tropical Water Lilies.



Shallow water plants do well in the tub garden and are included in our Tub Collections. Notice the Taro, Shell Flower, Spiral Palm and Rock Plants in this tub garden.

Order early! Our supply of some varieties is almost sure to become exhausted.



MARSH or BOG PLANTS



JUST at the edge of your pool you will need clumps of ornamental and semi-tropical plants.

Plant the roots of these plants in rich wet loam. Be sure to leave the crowns and stems high enough to get the air and sunlight. In a concrete pool you may have a ledge or box of soil partially immersed to place these plants in. If you prefer you may put individual plants in flower pots set so that the top of the soil comes above the water level. Marsh plants do not mind wet feet but dislike to swim or wade. Many are excellent house plants and will grow indoors if the pot is set in a saucer kept filled with water.

BUTTERFLY LILY:

White (*Hedychium coronarium*). A tall canna-like plant with large leaves and very fragrant white blossoms borne in umbels. A very handsome plant. \$1 for 2.

Yellow (*Hedychium chrysocucum*). A native of India, and while similar to the preceding variety is considered the best of the genus and very desirable. In habit it is tall-growing, and the light yellow flowers are followed by bright red berries. Quite desirable semi-aquatic plant. \$1 for 2.

CALLA LILIES:

Golden Calla (*Zantedeschia elliottiana*). The most desirable of the yellow Calla Lilies. Its flowers are as large as the well-known white variety, but are a lustrous golden yellow. The foliage is dark green with translucent spots of creamy white, and adds more to the beauty of the bloom. \$1 each.

White Calla (*Zantedeschia aethiopica*). One of the best water plants for summer use. Perpetual flowering; fine white flowers. Not hardy but can be kept indoors through the winter. Flowering plants, \$1 each.

FORGET-ME-NOT (*Myosotis scorpioides*). A well-known spring and summer flowering plant with small clusters of clear blue flowers with a yellow eye. \$1 for 3; \$2.50 per doz. Hardy.

IRIS pseudacorus (*Yellow Flag*). A tall, sword-leaved plant bearing broad yellow flowers of the Japan Iris type. Valuable and attractive. Hardy. \$1 for 3; \$2.50 per doz.

IRIS versicolor (*Blue Flag*). Exactly like the yellow Flag except that the flowers are blue. \$1 for 3; \$2.50 per doz.

JAPANESE TARO:

(*Colocasia violacea*). Beautiful blue-green leaves. The stems, mid-ribs, veins and edges of leaves are lavender. One of the most effective Taros. See full description on page 11. \$1.50 each.

(*Colocasia multiflora*). A very unique foliage plant. The leaves are rich green, on dark purple stems. As a marginal plant for the pool, it is very ornamental as it will grow to a height of 4 to 5 feet. 75c each.

(*Colocasia antiquorum illustris*). Similar to the above variety with leaves blotched dark brown and black. A new introduction. See full description on page 11. \$1 each.

LOBELIA cardinalis (*Cardinal flower*). One of the most attractive plants of our native flora, seen along streams and low, moist ground, sometimes a few spikes of rich, fiery cardinal flowers; again in masses, when the sight is brilliant and dazzling.

MARSH MARIGOLD (*Caltha palustris*). Clusters of large butter-cup-like flowers of brilliant yellow, early in spring. One of the most attractive native plants. Hardy. \$1 for 3; \$2.50 per doz.

PAPYRUS or EGYPTIAN PAPER PLANT (*Cyperus papyrus*). The stalks are triangular and attain a height of 5 to 8 feet. At the top is a tuft of long thread-like leaves which gives the plant a most novel appearance. Shallow water and rich soil spell the best combination for this plant, but it also does well in ground kept slightly moist. Good as a background plant for pools and ponds. \$1 for 3; \$2.50 per doz.

PRIMROSE WILLOW (*Jussiaea longifolia*). Erect plants 2 to 3 feet high, with attractive narrow foliage and bright yellow blossoms profusely borne in the axils of the leaves. Very desirable at the edge of pools or in tub culture. \$1 for 3; \$2.50 per doz.

SPIRAL PALM. A Brazilian oddity something like the Umbrella Palm. Greenish white flowers produced in umbels. \$1 for 3; \$2.50 per doz.

UMBRELLA PALM (*Cyperus alternifolius*). Grows well either in small pools or moist ground. \$1 for 3; \$2.50 per doz.

DWARF UMBRELLA PALM (*C. gracilis*). This is the dwarf form; fine for aquariums and tubs. \$1 for 3; \$2.50 per doz.

WATER CANNA (Thalia):

Dealbata. A handsome canna-like aquatic standing 3 feet high. Hardy. Purple blooms from June to September. 75c each.

Divaricata. A new introduction. Like the above except that this is a taller-growing variety. Purple flowers. \$1 each.

COLLECTIONS

(Collections No. 26A and 26B)

Five varieties of Bog Plants, \$1.50

Ten varieties of Bog Plants, \$2.50

HARDY FERNS for SHADY PLACES

Three types that thrive under vigorous conditions, such as foundation plantings, shady rockeries, or the margins of ponds.

4 **OSTRICH FERNS** (*Struthiopteris germanica*).

4 **LADY FERNS** (*Asplenium Felix-faemina*).

2 **OSMUNDA CLAYTONIANA**.

COLLECTIONS

(Collection No. 27)

This Collection of 10 Ferns for \$3.50

Two Collections (20 Ferns) for \$6

HARDY BAMBOOS

The first thoughts for a tropical garden are bamboos. They are hardy as far north as New York or Cleveland.

BAMBUSA AUREA. Close-jointed canes; leaves that are light, small and very graceful. \$1 each.

B. AURICOMA. A green and yellow variety that is very pretty. It will grow to 3 feet and make a rather compact growth. It is most effective when used in connection with the green-leaved varieties. \$1 each.

B. FORTUNEL. A dwarf variety that is about 18 inches high. The foliage is green and white. \$1 each.

B. JAPONICA. An interesting variety with broad green leaves. It grows 36 inches in height. \$1 each.



Hyacinth, Poppy, Taro and Spiral Palm
in a harmonious grouping.



HARDY PERENNIAL PLANTS

for Margins and Backgrounds

NATURE always sets hardy plants around a small pool, and along the banks of a sluggish stream. So far as possible this plan should be carried out with the artificial pool in the garden.

The question often arises as to what should be planted around the pool that will be in keeping with the aquatic plants. The answer can only be such perennials as will thrive in wet soil. Such a condition must be "made" around an artificial pool, but around a natural pond the place is already there. The following plants are most suited of all the hardy perennials for use under such conditions. Be sure to keep the ground around the artificial pool always moist. The luxuriant growth of these plants when plenty of moisture is available is astounding. Most of the perennials are grown in 3 and 4 inch pots, and when shipped from such are in best condition for planting. No roots are disturbed, as in digging from the field, and the plants quickly begin to produce results.

Unless noted, all perennials are \$1 for 3; \$2.50 per doz.

HARDY ASTERS. These hardy New England Asters are very showy, and by reason of their late flowering are very attractive around the pool. They grow easily under most conditions, but thrive particularly well in great abundance where there is considerable moisture. Grow about 3 feet high. Order by color: Pink, purple, blue and lavender.

ASTILBE (Spirea). Graceful flower spikes of Spirea-like flowers, free flowering and desirable. Plants grow 3 or 4 feet high. Order by color. Pink or white.



Japanese Iris

JAPANESE IRIS
(*Iris Kaempferi*). This is the elite of the Iris family. The flowers begin to open about the third week of June (New York City latitude) and continue for several weeks. They grow well in any good garden soil but delight in an abundant supply of water. For massing or planting along a stream or around a pool Japanese Iris are ideal. Strong divisions of unnamed varieties, ranging in color from pure white to the richest purple.

PLANTS for GROWING among ROCKS

A selection of rock plants is included in our Tub Garden Collections, page 4.

Achillea
Cerastium tomentosum
(Snow-in-Summer)
Dianthus deltoides (Maiden Pink)
Festuca glauca (Blue Fescue Grass)

Hen and Chickens
Myosotis alpestris (Forget-Me-Not)
Phlox subulata (Moss Pink)
Sedums in three varieties
Thymus vulgaris
Veronica rupestris

Single varieties, \$1 for 3; \$2.50 per doz.
(Collections No. 29A and 29B)

15 plants in at least 5 varieties, our selection, \$3.
45 plants in at least 10 varieties, our selection, \$8.



Lemon Lily (*Hemerocallis*) and Water Lilies—where can a more pleasing picture be found?

LEMON LILY (*Hemerocallis dumortieri*). Dwarf; flowers in June. The flowers are a rich cadmium-yellow but the buds and the reverse side of the petals are more of a bronze-yellow, making a pleasing contrast.

H. Dr. Regel. Very early flowering; a rich golden yellow. One of the very best day lilies.

EUPATORIUM BLUE. Light purple flowers similar to the Ageratum. Blooms from August until frost. A pretty, hardy plant from 1 to 2 feet in height. Good cut flower.

EUPATORIUM WHITE. Minute white flowers in dense heads; fine for cutting. A useful border plant of strong, free growth, 3 to 3½ feet high.

SIBERIAN IRIS (*Iris Siberica*). Fine for marginal planting. Grassy foliage and purple flowers.

MEADOWSWEET (*Filipendula palmata*). Silvery pink flowers in broad, flat clusters, in June and July. Dark green foliage and purple-red stems and branches. One of the most useful hardy plants.

F. ulmaria fl. pl. Has double white flowers during June and July. Grows about 3 feet high.

FORGET-ME-NOT (*Myosotis scorpioides*). See Bog Plants, page 32.

COLLECTION

Hardy Perennials

We offer a collection of 15 plants of the above 11 varieties of beautiful and popular Perennials, our choice, \$3

(Collection No. 28)

ORNAMENTAL GRASSES

Pleasing and Graceful

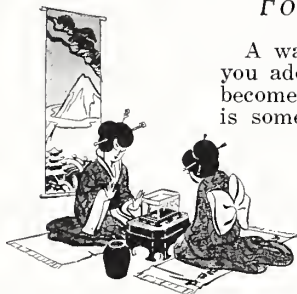
MISCANTHUS sinensis gracillimus. The most useful and desirable of all the Eulalias. Its long, narrow, graceful foliage with silvery midrib renders it a very striking and distinct plant as a specimen or for grouping. \$1 for 3; \$2.50 per doz.

VARIEGATED RIBBON GRASS (*Phalaris Arundinacea* Var.). This attractive grass is splendid for use at the corners of your pool and at junctures of a walk. It is also fine for grouping around a large clump of Pennisetum, Jap Iris or Hemerocallis. The leaves are longitudinally striped with white and are very ornamental. 25c each; \$2 per doz.



ORNAMENTAL FISHES

For Outdoor Pool and Indoor Aquarium



A waterlily pool is always picturesque, but when you add gay-colored fishes—that is when your pool becomes the most alluring spot in the garden. There is something about these active little creatures as they slip quickly among the plants or glide leisurely about, that will make you want to spend much of your time watching them. And there are so many kinds of beautiful fishes—as you look over these pages you'll be amazed at the great number of pretty and unique types you can choose from.



THERE is a fascination about keeping fish that only experience will enable one to understand. As pets they are most satisfying, and here we speak of fishes in the indoor aquarium where we can observe them through all stages of their existence. For tropical fishes will thrive in the well planted aquarium perfectly at home, will establish family life, court and love, raise young ones, have squabbles, and amuse you in a thousand and one ways.

The ever popular aquarium has produced a demand for more select and interesting goldfish. Here you will find them—white ones, gold ones, black ones, and those with calico patterns and colors, small ones for the aquarium, giants for the pool—fishes as beautiful as anyone could imagine. Perhaps the only reason the goldfish is more popular in the average home today is because not as many people know how interesting tropical fish are and how easily they may be kept. A supply established in the pool in spring will provide enough fish for a good sized indoor aquarium in the fall. Everyone is bound to take extreme delight in the tropical varieties.

Fishes Require Little Care

Fishes in the pool will take care of themselves, no feeding being required unless the pool is very small and a number of large fish are kept therein.

Fishes in aquariums should be fed as follows:

Goldfishes should be fed dried shrimp or In-nur-co, about three times a week, or angleworms whenever they are available. The white wafer food is deficient in nourishment and should be used only in connection with other food, just as we use bread in our diet.

More fishes are killed by over-feeding than anything else. With the exception of young tropicals, they should never be fed oftener than once each day or more than they will eat up entirely in fifteen minutes. Waste food will spoil and bring about bad conditions in the aquarium.

Tropical fishes should be fed dried shrimp and dried daphniae with an occasional treat of enchytrae worms. Tropicals also like a morsel of canned salmon or boiled fresh fish occasionally. They do not over-eat and should be fed every day, young fish oftener. However, no excess food must be allowed to collect and decay.

Ichthyophtherius in your aquarium, a disease which sometimes attacks tropicals, may be cured by adding our Ich cure directly to the water, two drops per gallon and by increasing the temperature to 90 degrees.

The Balanced Aquarium

The ideal aquarium is one large enough to provide for the growing of a number of plants in the water to balance the animal life. In the balanced aquarium the plant life provides the oxygen needed by the fishes and the water is never, or at least rarely, changed. With the aid of snails and clams to keep the aquarium clean, the only attention required is the daily feeding.

The rule for a balanced aquarium for goldfishes is at least a gallon of water, or 20 square inches of water surface for each inch of fish body. If less is used, a part of the water should be changed when the fish gasp at the top. In the small aquarium, it is necessary to change the water at intervals according to the size of the aquarium and number of fishes.

Wintering Fishes

Goldfish may be wintered outside in natural ponds but when in pools free from soil and plant roots, care should be taken to break the ice frequently so that the water does not become foul from lack of aeration. A glass aquarium is an excellent investment as it permits you to enjoy the beauty of the fish all winter. If mere storage is desired, a tub in the basement will do nicely. There is no set rule for changing water except that when the fish gasp for air at the top it is evident that they are in distress and need at least part of the water changed.

Tropical fishes should, by all means, be kept in an aquarium. They are too beautiful to be stored in the basement. When growing plants are established in the aquarium, it is possible to crowd quite a few fishes into small quarters. In any case, they should be removed from the pool before the temperature falls much below 60 degrees.

Let Us Help You

Should you have any unusual trouble with your fish let us know about it, telling us all conditions in detail. Our research department keeps posted on remedies for fish diseases, breeding methods, and proper feeding. We will be glad to compare notes with you and distribute information of value whenever it is wanted.

BOOKS on FISHES

The best way to succeed with fishes is to have a good book to refer to. We are glad to recommend the following books, which have been written by the best authorities in the country, and which we can supply:

GOLDFISH VARIETIES and TROPICAL AQUARIUM FISHES, by W. T. Innes, former president of the Philadelphia Aquarium Society. This is the only modern work in English that covers its subject comprehensively, dealing with various aquarium fishes, their care, habits, breeding, diseases, and relation to aquatic plants. One chapter is devoted to the construction of aquariums and concrete pools. New 1929 edition, 300 pages with 275 illustrations. \$4 a copy.

MODERN AQUARIUM, by W. T. Innes, author of "Goldfish Varieties," etc., listed above. A new book covering the breeding and general care of goldfishes and tropical fishes. 64 pages and 30 illustrations. \$1 a copy.

The quick and easy way to select fish is by collections. See pages 35 and 43.



GOLDFISHES

Beautiful and Unusual



THE goldfishes, because of their striking beauty, are favorite pets today in thousands of homes. They are the most commonly known and universally admired of all the ornamental fishes.

After years of selective breeding many novel varieties of this fish have been produced that will be fascinating to you. The introduction of new and more interesting varieties has been going on for ages. In tracing the origin of goldfishes, we find that the Japanese, the Koreans and the Chinese, the first civilized nations, bred them two thousand years ago ever striving to develop new sorts. This work has continued and so we can probably introduce to you in this catalog many types that will be unusual and interesting. You will be pleased with them in an aquarium or in a pool.

Most of the following types are sold in pairs. We exercise our best judgment in selecting the pairs, but, because it is sometimes difficult to determine accurately the sex of goldfish, we are unable to guarantee this factor. They are shipped to you in cans. A charge of 50c for the shipping can is made on small orders. When large cans are used, they are returnable by prepaid express at a cost of 20c. See ordering instructions page 39.

The illustrations, in color, show several different perfect types sought in breeding fancy goldfishes, but perfection is attained only in rare instances. Perfect specimens of the various types often bring as high as \$50 to \$200 on the market, so scarce are they. The general run of goldfishes approximates these types in shape, coloring and fin development when fully developed. They are not, of course, prizewinners, but exceedingly beautiful just the same.

Ornamental Giant Fishes for Pools

YOUNG GIANTS. The young giant goldfish, not as fully developed as the older type. Varies in length from 8 to 10 inches. This large fish lends a distinctive color note to the pool and is excellent for spawning. By the end of the summer there are usually a number of baby fish in the pool, just turning gold. \$2.50 a pair; \$12 per doz.

GIANT GOLDFISH. Selected breeders 10 to 12 inches long, \$5 a pair; \$25 per doz.

GIANT COMETS. Giant goldfish of the single tail type, very active. Twelve inches in length. \$6 per pair; \$30 per doz.

GIANT ORIOLES. This is a giant goldfish in the popular orange and black colors. (The Princeton colors!) Ten to twelve inches, \$6 per pair; \$30 per doz.

GIANT PEARLS. Glistening, pure-white scales which occasionally have a spot of deep red. Ten to twelve inches, \$6 per pair; \$30 per doz.

GIANT SHUBUNKINS. These are single tailed goldfish with calico coloring of blue, red, gold and black. 7 to 9 inches long. The name "Shubunkin" comes from the Japanese, meaning "Autumn Brocade." A thoroughly hardy and quite prolific fish. \$10 per pair.

Other Types for Pools or Aquariums

COMET TAILS. Like selected goldfishes in coloring, but with longer graceful fins and tails. Their rapid movement adds animation in aquariums. (See illustration in color on page 36.) 3 to 5 inches are \$1 a pair; \$5 a doz. 6 inches, \$1.50 a pair; \$7.50 a doz.

JAPANESE FANTAILS. Similar to Korean Fringetails but smaller, with shorter and less perfectly formed tails. Gold, white and black markings. \$2 a pair; \$8 a doz.

CALICO FANTAILS. Marked like the Shubunkin but with the divided tail. \$3 a pair; \$12 a doz.

LIONHEADS. Another Oriental novelty, differing from the other fishes in having no dorsal or back fin. With its short fantail it swims with a waving movement. The name arises from a peculiar hooded growth about the head that develops when the fish is several years old, giving the appearance of a lion or buffalo head. (See illustration on page 36.) One year Lionheads, \$7.50 a pair. Two year Lionheads, \$15 to \$25 a pair.

ORANDA. Same as Lionhead, except they have a dorsal fin and are more fringetailed. \$10 per pair and up.



Veiltail Calico Telescope

SELECTED GOLDFISHES. A selected group of these fish can be purchased. Those fish measuring 3 to 6 inches long are priced at \$3 per dozen or \$20 per 100. Fish measuring 6 to 8 inches are \$5 per dozen or \$35 per 100.

COLLECTIONS of Goldfishes

See note about sex of Goldfish and shipping can charge.

ORNAMENTAL COLLECTION (NO. 30A)

One pair each of Fantails, Telescopes, Moors, Comets, Albino, and Calicos. One pair Japanese Snails, one dozen Black Ramshorn Snails. This collection, 12 fancy goldfish in all, 14 Snails and
shipping can **\$12**

VEILTAIL COLLECTION (NO. 30B)

For the individual who desires the best in ornamental fishes. One pair each of Calico Telescopes, Veiltail Moors, Calico Japs and Lionheads.
8 beautiful specimens **\$60**

HOW TO LAND THE BIG ONES (NO. 30D)

Why tell your friends about the big fish that fell off the hook? Show them some in your pool. One pair each Giant Goldfish, Giant Comets, Giant Orioles, and Giant Pearls, 8 whoppers..... **\$15**

MIKADO COLLECTION (NO. 30C)

One pair each of young Calico Veiltails, Veiltail Moors, Jap Veiltails, Fringetails and Lionheads; with Oxygenating Plants (Col. No. 35B), suitable for 18 gal. aquarium. Illustrated on page 45. \$32.50 value
for **\$25**

GINGHAM COLLECTION (NO. 30H)

"Six Little Rompers"—one pair each of Calico Shubunkins, Calico Fantails and Calico Telescopes; with 2 Neptune Chemical Purifiers, 1 box O'Brien Fish Food, and shipping can. \$7.50 value..... **\$6**

JAPANESE CALICO FISHES. (Shubunkin).

The word "Shubunkin" is Japanese and is translated to mean "Autumn Brocade." This is a fitting name, for the fishes are marked in a brocade pattern of glorious colors like the autumn foliage and even more varied. Blue is the predominating color, with mottled effects in red, gold, black, brown, lavender and white.

The true Shubunkin is the single tailed type gold fish and very active. Its quick movements afford a fine display of its colorings. It is a fine fish for aquarium or garden pool, having great vitality. 3 to 4 inches, \$1 a pair; \$5 a doz. 4 to 5 inches, \$2 a pair; \$8 a doz. 5 to 6 inches, \$3 a pair; \$12 a doz.

The Goldfish is a Beautiful Ornament for the Home as Well as the Pool.



VEILTAIL JAP

VEILTAIL MOOR

LIONHEAD

Veiltail Fishes

Of Japanese origin, these are the highest development of goldfish, with transparent scales and colors of the rainbow. The fins and tail are double, and long, flowing and graceful. All are prized by fish fanciers.

The secret of developing good Veiltails is constant and careful selection and breeding. Our Veiltails are raised by qualified experts.

It is difficult to quote exactly on Veiltails as they vary in form, coloring and marking. We try to meet your preference as near as possible.

BROADTAIL TELESCOPE CALICOS. Veiltailed fishes marked like the Shubunkin, with blue, red, black and white markings, and protruding eyes. \$7.50 to \$15 each.

VEILTAIL JAPS. Without protruding eyes. All the beauty of the true Japanese goldfish in the graceful veiltailed form. (See illustration in color above.) \$7.50 to \$15 each.

YOUNG VEILTails. Our choice of either Veiltail Japs or Broadtail Telescope Calicos. \$2 to \$4 each; \$8 to \$30 a doz., according to size and quality.

VEILTAIL MOORS. Black telescope, protruding-eye fishes in this graceful form. (See illustration in color above.) \$7.50 to \$15 each.

Fringetail Fishes

Little wonder that such prize fishes as these are famed for their beauty in lands far from home. They are curious fish that inspire exclamations of delight. They have two complete tails that spread out fan-wise.

KOREAN FRINGETAILS. The Korean Fringetail has a proud and haughty manner, and rightfully, for it is a real beauty. Seen in the aquarium, it inspires exclamations of delight. Colored deep red, sometimes with black or white markings. Selective breeding has developed two complete tails spreading out fanwise, and in the larger fishes, very graceful and drooping. (See colored illustration below.) \$3, \$5, \$7.50, \$10.00 a pair.

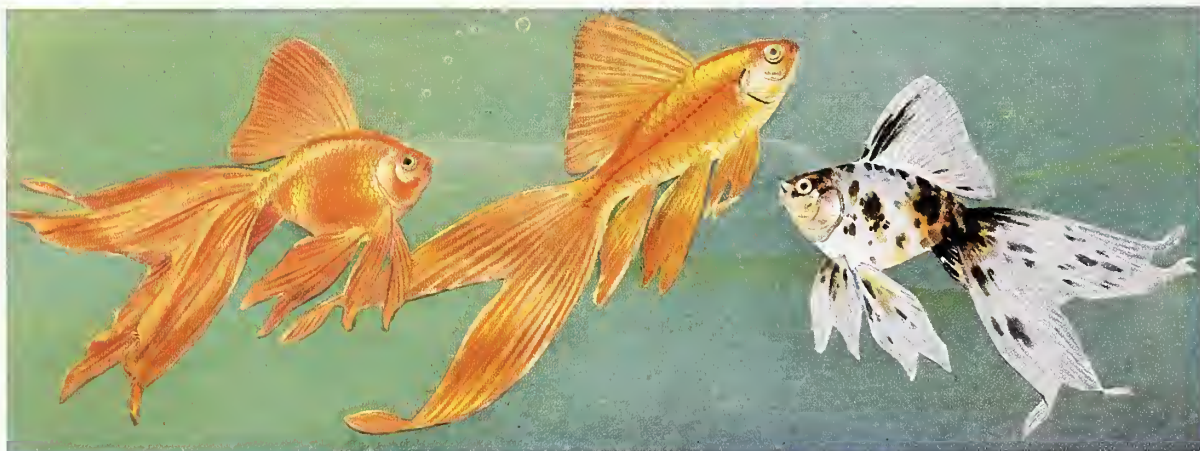
CALICO FRINGETAILS. A hardy species marked with brilliant mottled effect. A showy companion for the Korean Fringetail. (See colored illustration below.) \$5, \$7.50 and \$10 a pair.

Chinese Telescopes

The weird startling features of Chinese art are suggested in this curious fish, with its protruding eyes. The telescope eyes have been bred into fish of all colors, but it has been found impossible to develop any black fish (Moors) without the telescope eyes.

TELESCOPE MOORS (Black). This all black Chinese fish is highly prized and makes striking color contrast among brighter colored fishes. \$2, \$3 and \$5 a pair.

TELESCOPE REDS. This Chinese type is noted for its highly brilliant color and protruding eyes. An oddity in any aquarium. \$2 and \$3 a pair.



KOREAN FRINGETAIL

COMET TAIL

CALICO FRINGETAIL



Listed below are the names and page references of these tropical fishes.

LIVE BEARING VARIETIES

- (2) Blue Moons, page 38.
- (3) Sailfins, page 39.
- (8) Hybrid Helli, page 38.
- (9) Red Moons, page 38.
- (10) Gold Moons, page 38.
- (16) Rainbow Fish, page 38.
- (19) Mexican Swordtail, page 38.

BUBBLE NEST BUILDERS

- (1) Dwarf Gourami, page 39.
- (7) Paradise Fish, page 39.

CICHLIDS

- (15) Orange Chromide, page 41.
- (20) Jewel Fish, page 41.
- (21) Angel Fish, page 41.

MISCELLANEOUS

- (4) Tetra von Rio, page 42.
- (5) Cardinal Fish, page 41.
- (6) Silver Tetra, page 42.
- (11) Flying Barb, page 41.
- (12) Zebra Fish, page 42.
- (13) Rosy Barb, page 41.
- (14) Giant Danio, page 42.
- (17) American Flag Fish, page 42.
- (18) Golden Fundulus, page 42.



TROPICAL FISHES—Unique and Colorful

STOCK your pool or aquarium with Tropical Fishes and discover for yourself their captivating charm. You will marvel at their remarkable colors and forms—their quick movements will be a constant entertainment.

Tropical Fishes bring to your home the lure of foreign shores. Imagine having fishes in your aquarium that have been brought from such fascinating countries as Ceylon, Brazil, Malabar, China, Mexico, Africa! Study the list and notice their unique names—their individual characteristics are as unusual as their names. From Siam we have the magnificent Royal Fighting Fish—so attentive to its young, but such a savage fighter if another male appears. The handsome little Swordtail is from Mexican waters. The amazing Walking Fish once knew China as its home. Paradise fishes that place their eggs in an odd bubble nest, are natives of the East Indies. There are many difficulties and dangers involved in securing these rare and beautiful varieties, but by constant effort we are able to furnish all the most interesting and attractive types from these far-off countries.

You can have the exotic appeal of many of these Tropical Fishes in a small aquarium in your own home. Most of them are small, rarely more than three inches long, and as many of the varieties live peaceably together, you will be able to enjoy a good number of them. These fishes breed very successfully in a little aquarium. As in the aquarium, they may also be enjoyed in a water garden, whether it be a pool or a small tub.

Mosquito Killers

These fish are especially worthwhile in out-door pools because they are death to mosquito larvae. If you keep them in your pool you will never be bothered with mosquitoes from that source. They may be kept outdoors as long as it is warm. Indoors they will thrive all year round.

One would hardly expect all members of such a big family to get on well together, however, so for your convenience we have grouped together only congenial varieties in our collections listed on page 43. *The varieties that may be kept with goldfish are marked (*) in the listing.*

In ordering fishes, read the terms and instructions on page 39.

TROPICAL live-bearing FISHES

From Mexico and Central America

One of the interesting things about these varieties is that they do not spawn but give birth to live young at frequent intervals.

*Mexican Swordtails

MEXICAN SWORDTAILS (*Xiphophorus helleri*). See No. 19, page 37. Perhaps the most popular tropical fish. Has green sword. Adults are from 1½ inches to 2 inches long and the young are born in lots of fifty or more about every six weeks the year round. Medium size: \$2 per pair; \$5 for six; \$8 per doz. Extra large: \$3 per pair; \$7.50 for six; \$12 per doz.

ORANGE SWORDTAILS. Deep orange sword as shown in figure 19. \$3 per pair; \$7.50 for six; \$12 per doz.

CRESCENT SWORDTAILS (*Xiphophorus rachevii*). Like the Mexican Swordtails with a heavy, black crescent at the base of the tail. \$3 per pair; \$7.50 for six; \$12 per doz.



RED HELLERI. See No. 36, page 40. A beautiful hybrid of the Mexican Swordtail about 2 to 3 inches long and of a clear, dark ruby color with faint orange stripes. Small size: \$1.50 each; \$7.50 for six; \$12 per doz. Large: \$2.50 each; \$12.50 for six; \$20 per doz. In pairs: \$7.50.

GOLD HELLERI. A new hybrid, clear gold in color. The males have the swordtail. \$5 per pair.

BLACK HELLERI. A hybrid produced by the crossing of a Swordtail with a Black Moon — a very handsome fish with jet black body and glistening blue scales on head and bright yellow eye. Sometimes produce swordtails. \$5 per pair; \$12.50 for six; \$20 per doz.

HYBRID HELLERI. See No. 8, page 37. A cross breed of Swordtails and Moons produced this exceedingly beautiful fish with more color and greater brilliancy than either parent. A typical Red Hybrid is shown in Fig. 8. \$3 per pair; \$7.50 for six; \$12 per doz. Large size: \$5 per pair; \$12 for six; \$20 per doz.

*Moons or Platyi

To avoid the familiar argument about five species or five variants of a single species, we are listing these fish by their characteristic color. Any variety: \$2 per pair; \$5 for six; \$8 per doz.

BLUE MOONS (*Platyocellus maculatus* var. *pulchra*). See No. 2, page 37. The ground color is brilliant ultramarine with several vertical bars of dark navy blue. The male usually has red markings on the dorsal fin and sometimes on the body. Both sexes have a number of scales that gleam like particles of mica. Three-quarters to an inch and a half long.

RED MOONS (*Plat. mac.* var. *rubra*). See No. 9, page 37. Sparkling Red color which shows up in most striking contrast to the green plants of the aquarium. Very beautiful.

BLACK MOONS (*Plat. mac.* var. *nigra*). A striking jet black fish. A few black fish are always to be desired.

GOLD MOONS (*Plat. mac.* var. *aurea*). See No. 10, page 37.

GOLD MOONS (*Plat. mac.* *immaculatus*). A species popular among eastern fanciers. Plain gold without the black crescent or red saddle. Either of our strains breed true.

PURE RED MOONS. See No. 23, page 40. Solid red, no markings. \$3 per pair; \$7.50 for six; \$12 per doz.

*Rainbow, Peacock Fish or Guppyi

This is technically known as *Lebistes reticulatus*. See No. 16, page 37. The male is less than an inch long. The female is larger and bulkier. The best known of the live-bearing fishes. The young are born in lots of twenty every four or five weeks, and in a tank stocked with plants, quite a few will escape their cannibalistic parents and mature rapidly. A very important mosquito destroyer. \$1 per pair; \$2.50 for six; \$4 per doz.



Semi-Hardy Live Bearers

***LEOPARD FISH** (*Gambusia holbrooki*). A most active mosquito-killer that is used by government agencies all over the world. Very prolific and hardy above 45 degrees Fahr. Female, plain grey and about two inches long. Male, smaller and mottled with jet black. \$1 per pair; \$3 for six; \$5 per doz.

MOSQUITO FISH (*Heterandria formosa*). The tiniest of all fishes. The males are about $\frac{3}{4}$ inches long while the females measure from $\frac{1}{2}$ to $\frac{5}{8}$ inches. Just the thing for the 10c fish globe. 50c per pair; \$1.25 for six; \$2 per doz.

***SAILFINS** (*Mollienisia latipinna*).

See No. 3, page 37. The largest and hardiest live-bearing fish. They are about 3 inches long, are mauve-gray and marked with broken black lines like rows of stitching. The glory of the male is an immense dorsal fin that is over half the size

of his body. Both the fins and tail gleam with iridescent shades of green and blue. They are very effective in removing algae from the pool. Medium size: \$2 per pair; \$5 for six; \$8 per doz. Extra large: \$3 per pair; \$12.50 for six; \$20 per doz.

***BLACK MOLLIES** (*M. sphenops* var. *nigra*). See No. 33, page 40. A magnificent fish that is sometimes jet black or has a few glistening scales. The females are mottled olive gray and black. Their favorite food is the green algae. \$3 per pair; \$8 for six; \$15 per doz.

BELONESOX BELIZANUS. See No. 34, page 40. A rare live-bearer resembling the pickerel. Not particularly savage, but fond of live food and equipped with an over-size mouth. It has attractive iridescent colors. \$5 per pair; \$12.50 for six; \$20 per doz.

GIRARDINUS RETICULATUS. A new Live bearing introduction, something on order of *Gambusia* only markings more pronounced. \$2 per pair.



BUBBLE NEST BUILDERS

From East Indies and Southern Asia

A popular class, sometimes known as Labyrinth Fishes that are found in Asia, Indo-Australian Archipelago and tropical South Africa. The male builds a nest of bubbles and watches over the eggs and young after the female has deposited the eggs.

BETTA TRICKERI. See No. 31, page 40. First offering of this new variety of our own development. Its gracefully flowing fins and tail are exquisitely colored with blue, green, red, maroon and gold. See page 11 for complete description for this gem of tropical fishes. Medium size: \$5 per pair; Large size: \$7.50 per pair; Extra Large size, \$10 per pair.

BETTA CAMBODIA. Veiltail Fighting Fish. See No. 39, page

40. These fascinating fishes are beautiful beyond description. Their body scales are ordinarily white but in times of anger or courtship they are flushed with crimson. Their flowing fins and tails glow with the brilliance of sparkling gems of every hue. With all this barbaric splendor the male Cambodia is a savage and persistent fighter. The male is courteous to his mate and a careful nurse to the helpless young in their bubble nest. The presence of another male, however, means a finish fight, a trait that has won for the tiny fish a place in the savage pastimes of the Siamese nobility. \$5 per pair; Large size: \$7.50 per pair.

BETTA SPLENDENS. Similar to the Betta Cambodia but not so brilliant and without flowing finage. Colored in many shades. \$3.50 per pair.

***PARADISE FISH** (*Makropodus opercularis*). See No. 7, page

37. A tropical fish that will stand temperature as low as 40 degrees Fahr. Their average size is from 2 to 3 inches, increasing to 3 or 4 inches with age. They are very brilliantly colored and have vertical bars of all shades. Breed readily in the aquarium or pool by building a nest of bubbles at the surface. An active enemy of small insect pests such as mosquito larvae. Medium size: \$2 per pair; \$5 for six; \$8 per doz. Selected large pairs: \$3 per pair; \$7.50 for six; \$12 per doz.

POLLIES (*Polyacanthus dayi*). They resemble the Paradise fish but are smaller and more active. Their tails are rounded with the central rays extended. The male is exceptionally brilliant at spawning time. \$2 per pair; \$5 for six; \$8 per doz.

***DWARF GOURAMI** (*Colisa lalius*). See No. 1, page 37. A peaceable fish and the gem of any collection. \$3 per pair; \$8 for six; \$15 per doz.

STRIPED GOURAMI (*Colisa fasciatus*). About twice the size of the Dwarf variety and richer and darker in coloring. This fish has to be seen to appreciate its real beauty as words cannot describe it. \$5 per pair.

THREE SPOT GOURAMI

(*Trichogaster trichopterus*).

See No. 30, page 40. You'll like this fish with iridescent shades and with prominent black spots at the tail base and center of the body, the eye making the third spot. \$3 per pair; \$8 for six; \$15 per doz.

THICK LIPPED GOURAMI

(*Colisa labiosus*). Inter-

mediate between the *Lalius* and *Fasciatus*, and with characteristic thick lips. \$3 per pair; \$8 for six; \$15 per doz.

CROAKING GOURAMI (*Cten-*

ops vittatus). A novelty resembling both the Betta and the *Polyacanthus*. Male produces a purring sound when courting. New in this country. \$5 per pair.



Dwarf Gourami building bubble nest.

READ INSTRUCTIONS When Ordering Fishes

Send orders to nearest branch.

TERMS. (Effective Jan. 1, 1930.) We accept orders only when accompanied by funds sufficient to cover the price of the goods and 50 cents extra for the shipping pail. We do not pay express charges. Because live fish must be shipped in water, it is necessary that they go by express. We ship good stock carefully packed, but after the shipment has left our hands, we assume no responsibility whatever for delay, loss, or damage in transit, nor for results after arrival.

HOW AND WHEN WE SHIP. All shipments are made by express collect, unless you instruct us otherwise. Goldfish and supplies are shipped any time during the year. Tropical fish are shipped in ordinary cans from June 1 to October 1, but the remainder of the year it is best to use one of our special shipping cans, well insulated against cold. A deposit of \$3 is required to insure the prompt return of the insulated can.

QUALITY. Except where young fish are specified, our prices are for average size adults. When available, extra large or select fish are quoted higher, as are mated

pairs of some varieties whose sex is not easily determined.

CORRESPONDENCE. We try to answer inquiries regarding aquarium fish promptly, and to the best of our knowledge, but the first essential in aquarium management is the possession of books on the subject.

STOCK on HAND. All of the varieties listed here are standard stock, generally on hand. Please let us know what to substitute in case we are out of a variety you have ordered. We are continually increasing our stock with new and rare varieties of fish and plants, and shall keep you advised of such additions.

CARE AFTER SHIPMENT. Fishes are usually weakened by the express journey and sometimes injured, thus being susceptible to the attack of unfriendly organisms in the new water. They should be kept for a few days without food in a shallow bath of Turke Island Salt, or preferably a weak solution of German Fungus Cure, until they appear active and healthy. Tinting the bath a faint pink with Permanganate of Potash will help in case of injury. Do not put snails in the salt bath.



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Listed below are the names and page references to subjects illustrated.

LIVE BEARING VARIETIES

- (23) Pure Red Moons, page 38.
- (33) Black Mollienisia, page 39.
- (34) Belonesox belizanus, page 39.
- (36) Red Holleri, page 38.

SNAILS

- (40) Red Copenhagen, page 44.

BUBBLE NEST BUILDERS

- (31) Betta Trickeri, page 39.
- (39) Betta cambodia, page 39.
- (30) Three Spot Gourami, page 39.

CICHLIDS

- (22) Blue Acara, page 41.
- (26) Heros Spurius, page 41.
- (35) Geophagus braziliensis, page 41.

MISCELLANEOUS

- (25) Australian Rainbow Fish, page 42.
- (24) Striped Barb, page 41.
- (29) Pearl Danio, page 42.
- (27) Tetra Von Buenos Aires, page 42.
- (38) Pristella riddlei, page 42.
- (37) Haplochilus rubrostigma, page 42.
- (28) Haplochilus von madras, page 42.
- (32) Rasbora heteromorpha, page 42.



WALKING FISHES

From China and India

***CHINESE WALKING FISH** (*Channa fasciata*). This is the largest and the most interesting fish of the labyrinth type that have lungs in place of gills and must come to the surface frequently to breathe. To see this fish walk, just put him down on a damp board or concrete walk and let him take a constitutional. This fish takes excellent care of its young at all times. The adult is from 6 to 10 inches long and colored a rich, dark olive-brown with silvery dots arranged in various designs. The floating eggs hatch in a few days to a swarm of tadpole-like young that eat so much that they grow almost visibly. The parents lead them around under close guard until they are large enough to devour their water-bug enemies. The Channas stand low temperatures and crowded quarters, but an aquarium should be covered to prevent them from jumping out. To provide a constant supply of infusoria for the newly hatched fishes of any kind, it is only necessary to keep a Channa in a small aquarium and feed well with raw meat. Infusoria develops rapidly and may be dipped out daily as the young fish require it. Adult mated pairs: \$5; young Channas, \$2 per pair; \$5 for six; \$8 per doz.

CICHLIDS

From Africa and South America

This is a class of fish that guards particularly well its eggs and its young.

***JEWEL FISH** (*Hemichromis bimaculatus*). The coloring of this fish as shown in No. 20, page 37, is only part of the story. The Jewels spawn freely on flower pots or stones, fan the eggs and care for the young. This is a very popular fish. Mated pairs: \$5.

***ORANGE CHROMIDE**. (*Eetroplus maculatus*). See No. 15, page 38. A beautiful fish, highly compressed body of orange or canary yellow to golden, with three large dark blotches, the middlemost surrounded with light yellow, the other two sometimes disappearing. Dorsal and Anal fins dotted with red and edged with dark brown or black; caudal edged with red. A favorite among advanced fanciers. Very prolific and a careful parent. Mated pairs: \$3.50.

STRIPE ACARA (*Acara portalegrensis*). A peaceable round-bodied fish. According to the mood of the fish it appears to have either a single horizontal stripe or a series of vertical bars. The background is a warm brown with yellow coloring on the fins and tail. A fish that spawns every few weeks on stones or flower pots. Mated pairs: \$5.

BLUE ACARA (*Acara coruoleopunctata*). See No. 22, page 40.

A very handsome fish of steel blue. It has gleaming flecks of a lighter shade. The fins are edged with red. Mated pairs: \$6.

ACARA CURVICEPS. One of the most brilliant Cichlids. Has beautiful silver blue body with orange and red dots and streaks. Same habits as other Acaras. \$5 per pair.

CHANCHITO (*Heros facetum*). The best known and most likeable of the Cichlid family. Its name in Mexican means "Little Pig." It is easily bred in small aquariums where they defend their young by attacking all interlopers, including the fingers of their owner. They are colored with vertical black bars on an olive background. Mated pairs: \$5.

***HEROS SPURIUS** (*Cichlasoma severum*). See No. 26, page 40. A peaceable and rather shy fish. It is colored with warm brown shades that change to dark green or black in the mating season. The fins are striped and dotted. Mated pairs \$5.

***ANGEL FISH** (*Pterophyllum scalare*).

The "King of Aquarium Fishes." See No. 21, page 37. It prefers a temperature of 70 degrees Fahr. or above. It is a native of the Amazon and very interesting. Young fish 4 to 5 inches long; \$10 per pair. Beautiful adult specimens; \$20 per pair.

***CHAETODON** (The Poor Man's Angel Fish). A fish closely related to the Angel Fish but without the long "wings." It may be kept in cold water with goldfish. \$2 per pair; \$5 for six; \$8 per doz.



Chinese Walking Fish

GEOPHAGUS BRAZILIENSIS. See No. 35, page 40. A colorful fish from the waters of Brazil. See page 11 for complete description. Medium size: \$2; Mated pairs, \$3.50.

***EGYPTIAN MOUTH BREEDER** (*Haplochromis strigigena*). A small, brilliantly colored fish that is something like the native sunfish but has a very large mouth. Their eggs are laid in a sandy depression and later picked up by the female who carries them 18 days in her mouth until they are hatched. Mated pairs: \$3.50.

BADIS BADIS. A small, beautifully colored red and blue fish that is closely related to the Cichlids. It prefers to spawn in a flower pot imbedded vertically in the sand. Mated pairs: \$3.

POLYCENTRUS SCHOMBURGKI. An odd fish with transparent fins and tail. Its body is gray brown but in spawning season the male becomes jet black with glistening scales like flecks of mica in a vein of coal. Mated pairs: \$3.

Hardy MOSQUITO KILLERS

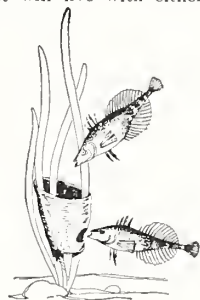
***CARDINAL FISH** (*Chrosomus erythrogaster*). See No. 5, page 37. An exceedingly beautiful fish that will live with either goldfish or tropicals. \$1 per pair; \$2.50 for six; \$4 per doz.

PEARL ROACH (*Scardinius erythrophthalmus*). A beautiful fish with pearl scales and red fins. \$1 per pair; \$2.50 for six; \$4 per doz.

***NEST BUILDING STICKLEBACKS**.

One of the most interesting and useful of hardy fishes. The pair carefully build a nest of twigs and plants, usually in the form of a hollow sphere. They are easy to keep in an aquarium with tropicals or goldfish and are excellent mosquito killers in the pool. \$1 per pair; \$2 for six; \$3.50 per doz.

BLACK BULLHEADS. Jet black; long whisker-like feeler. Will live with goldfish. \$1 per pair; \$2.50 for six; \$4 per doz.



Miscellaneous TROPICAL Fishes

The Barbs

The group belongs to the Cyprinidae family and are most satisfactory as aquarium fishes. They spawn on plants just like the goldfish. The Barbs are found in Asia, Africa and Europe.

***ROSY BARB** (*Barbus conchonius*). See No. 13, page 37. A very hardy fish with large glistening scales. \$2 per pair; \$5 for six; \$8 per doz.

STRIPE BARB (*Barbus semifasciatus*). See No. 24, Page 40. Green, gold and brown with vertical black bars. \$2.50 per pair; \$6 for six; \$10 per doz.

***FLYING BARB** (*Esomus malaynesis*). See No. 11, page 37. A fish built for action in water or air. Of course, it really does not fly but it can leap incredible distances. Very prolific and rapid in growth. \$1.50 per pair; \$4 for six; \$6 per doz.

IRIDESCENT BARB (*Barbus oligolepis*). A brilliant little fish with red and silver marking. Its fins are edged with black. \$2.50 per pair; \$6 for six; \$10 per doz.

SILVER BARB (*Barbus ticto*). Scales of burnished silver with two black dots near the gill plate and at the root of the tail. \$2 per pair; \$5 for six; \$8 per doz.



Angel Fish



MISCELLANEOUS TROPICALS—Continued

Danios

These are popular aquarium fishes on account of their active movements and flashing colors. They are natives of India, Ceylon and the Malabar Coast.

***ZEBRA FISH** (*Danio rerio*). See No. 12, page 37. A small, active fish marked with horizontal stripes of deep blue and yellow on body, fins and tail. Being constantly in motion, they are always popular. \$1.50 per pair; \$4 for six; \$6 per doz.

PEARL DANIO (*D. albolineatus*). See No. 29, page 40. A fish colored with iridescent mother of pearl and fiery tints of opal. \$2 per pair; \$5 for six; \$8 per doz.

SPOTTED DANIO (*D. analipunctatus*). Similar to the Zebra fish but with the lower body stripes replaced with dark blue dots. \$2 per pair; \$5 for six; \$8 per doz.

***GIANT DANIO** (*D. malabaricus*). See No. 14, page 37. \$3 per pair; \$7.50 for six; \$12 per doz.

Characins

Interesting fishes found in the streams of Central and South America. They deposit adhesive eggs on plants much the same as Cyprinidae, a family of fish to which Characins are closely related. Very colorful and active.

***TETRA VON RIO** (*Hyphessobrycon flammeus*). See No. 4, page 37. A tiny fish that is seldom more than an inch long. Very popular novelty. \$2.50 per pair; \$6 for six; \$10 per doz.

TETRA VON BUENOS AIRES (*Hemigrammus caudovittatus*). See No. 27, page 40. Much larger than its related fish but not so brilliantly colored. The hues on its back are changeable and its fins are yellow and red. \$2.50 per pair; \$6 for six; \$10 per doz.

COPPER SPOT TETRA (*Hemigrammus ocellifer*). Beautifully marked with gold and silver, with fiery carmine eye and brilliant copper spot at base of spine; black caudal edged with white and scarlet.

***SILVER TETRA** (*Ctenobrycon spilurus*). See No. 6, page 37. A deep bodied fish. It has fine silver scales with an overlying sheen of green and blue. Very prolific. \$2 per pair; \$5 for six; \$8 per doz.

HEMIGRAMMUS UNILINEATUS. A little more compressed than other Tetras. Color glistening silver green. All fins edged with black and opaque white. An oblique black line runs length of dorsal and anal. \$3 per pair.

PRISTELLA RIDLEI. See No. 38, page 40. A tiny Tetra with barred fins of red, black, white and yellow. \$3 per pair; \$7.50 for six; \$12 per doz.

BLOOD FIN (*Aphyocorax rubripinnis*). A fish with silvery pearl scales and blood red fins. Very striking in appearance. \$3 per pair; \$7.50 for six; \$12 per doz.

COPEINA GUTTATA. An attractive blue fish that spawns in the sand and fans its eggs like the Cichlids. The males have yellow fins, and crimson dots on their bodies. \$5 per pair.

MOENKHAUSIA OLIGOLEPSIS ("Red Eye" Tetra). A new introduction a little larger than the Tetras, attaining size of 2½ to 4 inches; body glistening silver white shaded with green and pink. Eye is brilliant red. Very attractive and easily kept. \$4 per pair.

Cyprinodontidae

Fishes in this class come from North, Central and South America and Europe, Africa and Southern Asia. Most of the real rarities and oddities in piscatorial life that are suitable for aquariums, belong in this group.

AUSTRALIAN RAINBOW FISH (*Melanotaenia nigrans*). See No. 25, page 40. Lively in movement, lively in color. Brilliant rainbow hues, hardy, not particular as to food. \$3 per pair; \$7.50 for six; \$12 a doz.

***AMERICAN FLAG FISH** (*Jordaniella floridae*). A vegetarian fish that is an active destroyer of algae. See No. 17, page 37. \$2 per pair; \$5 for six; \$8 per doz.

***GOLDEN FUNDULUS** (*Fundulus chrysotis*). See No. 18, page 37. An active and hardy mosquito killer. \$2 per pair; \$5 for six; \$8 per doz.

STAR HEAD (*Fundulus nottii*). Silver with black stripes that are horizontal on the male and vertical on the female. There is a silver star on the top of their heads. \$2 per pair; \$5 for six; \$8 per doz.



BLUE GULARIS (*Fundulopaneax coeruleus*). A steel blue fish with purple markings. A brilliant orange band runs through the tail fin of the male. \$5 per pair.

***HAPLOCHILUS RUBROSTIGMA**. See No. 37, page 40. An elongated fish covered with lines of gleaming green, gold dots. The female has six or more vertical black bars. The fins are edged with red. \$3 per pair; \$7.50 for six; \$12 per doz.

HAPLOCHILUS PLAYFAIRI. The males are green and gold. The females are olivaceous. \$2.50 per pair; \$6 for six; \$10 per doz.

***HAPLOCHILUS VON MADRAS**. See No. 28, page 40. A diminutive but brilliant fish with gold and red dots on a green background. \$3 per pair; \$7.50 for six; \$12 per doz.

MEDAKA (*Oryzias latipes*). A tiny gold minnow from the Japanese rice fields. \$1.50 per pair; \$3.50 for six; \$5 per doz.

BLUE RIVULUS (*Rivulus tenuis*). A blue and brown fish. The female has large caudal spot while the male has an orange bordered tail. \$3.50 per pair.

RASBORA HETEROMORPHA. See No. 32, page 40. A beautiful and very rare fish. \$10 per pair.

RIVULUS OCELLATUS. Green with blue spots and bands. The male has black edged fins and orange markings on his tail fin. \$3.50 per pair.

TROPICAL FISHES—Quick Reference List

PEACEABLE FISH (For the Happy Family Aquarium)

Swordtails, Page 38	Rasbora, Page 42
Moons, Page 38	Barbs, Page 41
Rainbows, Page 38	Danios, Page 42
Sailfins, Page 39	Characins, Page 42
Black Mollies, Page 39	American Flag, Page 42
Dwarf Gourami, Page 39	Fundulus, Page 42
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CONGENIAL WITH GOLDFISH

Sailfins, Page 39	Rosy Barb, Page 41
Chaetodon, Page 41	Silver Tetra, Page 42
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SEMI-HARDY

(Will stand temperature 45 to 60 degrees, but prefer it warmer.)

Rainbows, Page 38	Flying Fish, Page 41
Paradise, Page 39	Zebras, Page 42
Walking Fish, Page 41	American Flag, Page 42
Jewels, Page 41	Golden Fundulus, Page 42
Chaetodon, Page 41	Star Head, Page 42
Stickle Backs, Page 41	Medaka, Page 42
Cardinals, Page 41	Semi-Hardy Live Bearers, Page 39
Pearl Roach, Page 41	
Rosy Barb, Page 41	

TROPICALS FOR POOLS

Swordtails, Page 38	Cardinals, Page 41
Moons, Page 38	Pearl Roach, Page 41
Sailfins, Page 39	Rosy Barb, Page 41
Leopards, Page 39	Silver Tetra, Page 42
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Cichlids, Page 41	Golden Fundulus, Page 42
Stickle Backs, Page 41	Star Head, Page 42

Varieties Marked * may be kept in an Aquarium with Goldfish.



RARE TROPICAL FISHES

From time to time we are able to offer very rare varieties of Tropical Fishes. The following is a list of those that we do not always have on hand, the prices of which are variable. If you are interested in securing any particular species let us know.

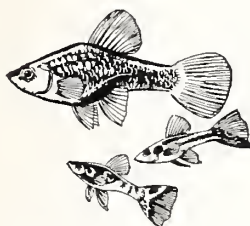
Scatophagus argus Mesanauta insignes
Corydorus macropterus Barbus lateristigriga
Rivulus urophthalmus

Unclassified TROPICAL FISHES

AMBASSIS LALA (Amber Fish or Indian Bass). A fish with a transparent golden body. Several dark vertical bands encircle its body. Its fins are edged with blue. \$6 per pair.

We offer a complete line of Fish Food, Remedies, and Aquarium supplies. See pages 46-47.

COLLECTIONS of Tropical Fishes



REALIZING that the true fish fan is never satisfied with one or two varieties of these interesting tropicals, we are making it easy to get a small collection at one time. With each collection we send a pamphlet on the care of Aquarium Fish.

LIVE BEARING COLLECTION (Collection No. 52)

One pair each of six varieties of fish that bear their young alive. Swordtails, Rainbows, Sailfins, several varieties of Moons, and a pair of the rare Black Mollenisias. This collection may be accommodated in a 12 gal. aquarium. Twelve fish and shipping can for \$10.

NOVELTY COLLECTION (Collection No. 50)

One pair each of the Chinese Walking Fish, Paradise, Mexican Swordtails, Jewel Fish, Japanese Weather Fish and American Flag Fish to fill an 18 gallon aquarium. Twelve fish and shipping can for \$12.

HARMONY COLLECTION (Collection No. 51)

One pair each of seven varieties of our choice. This collection usually includes Swordtails, Moons, Barbs, Danios, Flag Fish, Fundulus, Silver Tetra, Chaetodon and shipping can. May be accommodated in 12 gallon aquarium. Fourteen fish and shipping can for \$12.

FISHERMAN'S LUCK (Collection No. 54)

Our choice of six pairs of interesting tropicals. Better than if you pick them because we desire to please you. Suitable for 12 gallon aquarium. Twelve fish for \$10.

MOSQUITO KILLERS (Collection No. 55)

Maybe you do not care so much about fish but you are sure to be dead set against mosquitoes. The wrigglers that appear in every pond, puddle or rain barrel are the natural food of the tropical fish. Place a few fish in your pool or in a nearby water hole. Each year we have a lot of poorly colored "scrubs" that fail to meet our standards of aquarium fish. We are offering these good active mosquito-killing fish at \$2.50 per dozen including their shipping can. The silver variety of goldfish, 3 to 6 inches long, will be furnished if preferred. \$12.50 per hundred.

BUBBLE NEST BUILDERS COLLECTION (Collection No. 59)

Pair each of Paradise, Pollies, Dwarf Gourami, Betta Cambodia, Betta Splendens and Giant Gourami. Six pairs, \$20.50 value for \$15.

THE BEGINNER'S COLLECTION (Collection No. 57)

One pair each of Mexican Swordtails, Red Moons, Silver Tetra, Zebra Fish, Blue Moons, Paradise, Rosy Barbs, Rainbow Fish, Red Coral Snails and Jap Snails. Book on care of fish, Eureka aquarium No. 112, plants, white sand, one box each of Dried Shrimp and O'Brien Fish Food, thermometer, socket and clip for heating. \$32.50 value for \$22.50
With De Luxe aquarium No. 211, \$4.00 extra.

THE O'BRIEN COLLECTION (Collection No. 56)

One pair each of twenty Tropicals shown in color on page 7 (except No. 20). Suitable for 30 gal. aquarium (No. 230) or in two or three smaller. 40 fishes in all. \$42.50 value for \$35

THE TRICKER COLLECTION (Collection No. 58)

One pair each of Orange Swordtails, Pure Red Moons, Dwarf Gourami, Three-spot Gourami, Betta Cambodia, Red or Blue Hybrids and Danio Malabaricus, 4 Red Coral Snails. For aquarium No. 218. \$26 value for \$20

Cool Water Collections

Made up of varieties which are truly not tropicals as they will stand cooler temperatures than their tropical cousins.

FIELD STREAM COLLECTION (Collection No. 45)

Unusual and attractive hardy fishes that will stand cool temperatures. You may have hooked some of these on a fishing excursion. In the aquarium all are exceedingly interesting and attractive. 1 pair each of Chaetodons, Cardinal Fish, Pearl Roach, Black Bullheads, 2 Jap Snails, 2 Coral Snails, including shipping can. All for \$5.50

45 DEGREE COLLECTION (Collection No. 53)

One pair each of six varieties that will stand reasonably low temperatures and may be kept with goldfishes. Includes varieties like Sailfin, American Flag, Chaetodon, Cardinals, Medakas, Barbs, Fundulus, and Weather Fish. Suitable for 18 gallon aquarium. Twelve fish and shipping can for \$12.



SCAVENGERS for the Pool or Aquarium

THE plants in the water garden, just like all the others that beautify your grounds, should be kept cultivated, fertilized and free from insects if they are to look their best. Scavengers are the housekeepers of the pool and relieve you of this responsibility—fish feed upon the insects; snails devour algae and green scum; tadpoles eat decayed matter, and clams or mussels act as continuous filters to keep the water clear.

For your convenience we are listing some of the most valuable and interesting scavengers that keep pools and aquariums clear. Scavengers are the clowns of the aquarium.

AUSTRALIAN RED SNAILS (Isadora Proteus).

New this season. Snails that are smaller and more active than the Coral variety. They are a bright scarlet in color. Their shell is curled like the African snail. An ideal aquarium novelty. 50c per pair; \$2.50 per doz.

JAPANESE SNAILS.

These large, hardy snails should be in every pool and aquarium. They devour algae and green scum and thus help to keep the water clear. 50c per pair; \$2 per doz.; \$12 per 100.

CORAL SNAILS.

(Illustrated in color on page 40.) These are the finest aquarium snails in existence, and their coral red body and shell make them colorful as well as useful. Also known as Red Ramshorn or Copenhagen snails. 50c per pair; \$2.50 per doz.; \$15 per 100.

AFRICAN SNAILS.

Sometimes known as Paper Shell snails. Medium sized shells light yellow-brown, with dark spots or mottling. Hardy and prolific. \$1.50 per doz.; \$7.50 per 100.

BLACK RAMSHORN SNAILS.

Medium sized snails with shell characteristic of the name. Very prolific egg layers and particularly useful in removing the algae or green scum that forms in the sunlight. \$1 per doz.; \$5 per 100.

MELANTHO SNAILS.

Long spiral shells like the "Horn of Plenty." Active and hardy scavengers. \$1 per doz.; \$5 per 100.

GEOGRAPHIC TURTLES.

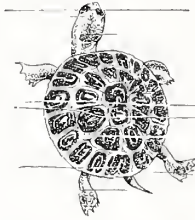
The most popular item in this list though admittedly more ornamental than useful. Little fellows about two inches across and with curious mosaic or maplike designs on both upper and lower shells. Like all water turtles they like to sun themselves and while waiting for lily pads to grow, they should have a rockery or floating board for this purpose. \$1 per pair; \$4 per doz.

AMERICAN SALAMANDERS.

A harmless species of water newt that may or may not be fireproof like its fabled ancestor. Golden brown with red lines and black dots on the back; yellow spotted with brown beneath. Closely related to the frog and fond of insects. 50c per pair; \$2 per doz.

JAPANESE SALAMANDERS.

A handsome type with black bodies and red vests. Like the above they are good insect-eaters. 75c per pair; \$3 per doz.



GEOGRAPHIC TURTLE



RED RAMSHORN SNAIL



AFRICAN SNAIL



JAPANESE SNAIL



CLAM WORKING IN SAND



WEATHER FISH



AMERICAN SALAMANDER



BABY ALLIGATOR



GREEN FROGS. Ornamental, likable, and the best insect trap ever known. When we see lily pads we expect to see a bull frog nearby. Any size. 75c per pair; \$3 per doz.

TADPOLES. The younger generation of the frog family that grow legs the first or second season; 3 inches long; active in devouring decayed matter and green algae. Entirely harmless to other fish and plants. \$1 per doz.; \$5 per 100. Shipping can 50c each.

CLAMS or FRESH WATER MUSSELS. An effective remedy for green or cloudy water. The clam lives by filtering the solid nourishment out of great quantities of water, leaving it crystal clear. They operate best in a few inches of soil or sand where they travel about occasionally and feed with shell or edge half buried in the earth. Use plenty of them and notice the difference in your pool. 50c per pair; \$2 per doz.

WEATHER FISH. A curious eel-like fish 4 to 6 inches long with a curious habit of inhaling sand and blowing it back through the gills. It is a most excellent scavenger, besides providing a natural cultivation for aquatic plants. \$2 per pair.

BABY ALLIGATORS. Little alligators about 10 inches long that soon become pets. They add a little Florida atmosphere. As they like tadpoles, stock your pool well. \$2 each; \$3.50 per pair.

Weather fish and tadpoles require shipping cans but the other scavengers are shipped in damp moss.

COLLECTIONS

SCAVENGERS

For Aquarium or Small Pool

(Collection No. 34A)

Half dozen each of Tadpoles, Jap Snails, Black Ramshorn or Melanthos, two Clams and a pair of American Salamanders with shipping can **\$2**

(Collection No. 34B)

For Large Pool

One dozen Jap Snails, one dozen Tadpoles, two dozen Black Ramshorn or Melanthos, six Clams, four Salamanders, and a pair each of Green Frogs, Geographic Turtles, and Singapore Snails, with shipping can **\$5**

(Collection of Snails, No. 34C)

It is difficult to get too many snails, performing as they do the useful function of removing decaying vegetation and particularly the green scum-like growth of algae. Use two snails per square foot of bottom area. General assortment \$1.50 per doz.; \$7.50 per 100.

PLANTS AND SCAVENGERS

(Collection No. 34D)

For 10-gallon aquarium, 5 varieties of plants, one Salamander, a pair each of Jap, Coral, and Ramshorn or Melanthos Snails **\$2**

(Collection No. 34E)

For 18-gallon aquarium. Sufficient plants in 7 varieties, one pair Salamanders, 4 Jap, 4 Coral and 6 Ramshorn or Melanthos Snails **\$3.50**

(Collection No. 34F)

For 30-gallon aquarium. Sufficient plants in 9 varieties, one pair Salamanders, 6 Jap, 4 Coral, 12 Ramshorn or Melanthos Snails, one pair Clams, 6 Tadpoles **\$5**

Don't overlook the Salamanders. They are the clowns of the aquarium.



OXYGENATING PLANTS

For Pools and Aquariums

To Keep the Water Clear and Pure

TO insure proper living conditions for your fish and to keep the water pure and clear, water gardens and aquariums should be planted with suitable oxygenating plants which absorb the impurities and liberate oxygen. Place an inch or two of well washed sand in the bottom of the aquarium—in this sand plant Vallisneria around the sides and back, with Sagittaria just in front of it, and bank sprigs of others in the corners and at points for ornamental effect. Let Salvinia float on the water.

ANACHARIS. Dark green foliage; lighter stems. 3 bunches 50c.

AZOLLA. Surface-growing plant with dark green or red leaves. 50c per portion.

CABOMBA. Glossy green, fan-like leaves. Stems red or green. 3 bunches 50c.

COONTAIL. Light green. Branches and leaves resemble those of a spruce tree. 3 bunches 50c.

CRYPTOCORYNE. Thrives in deep shade. Graceful, dark green leaves. 75c each or \$7.50 per doz.

CRYSTAL WORT. (Riccia fluitans). Dense grower. Protects young fish. \$1 per portion.

DUCK WEED. Goldfish feed on the small roots. 50c per portion.

FLOATING ELODEA. Rapidly forms a thick jungle of leaves several inches below the surface. Best protection for young fish. Portion 50c; pound, \$1.50.

HAIR GRASS. Will carpet your aquarium with two inch grass needles. Ideal for protecting eggs and young fish. \$1 for 25 plants.

LUDWIGIA. Foliage green above; pink beneath. 3 bunches 50c.

MICRANTHEMUM. Semi-floating plant that grows near the surface. 50c per portion.

MYRIOPHYLLUM. Fine, needle-like, green leaves in bushy formation, giving the appearance of plumes. A favorite for spawning purposes. 3 bunches 50c.

PARROT FEATHER. The growth above as well as below the surface offers ideal protection for the nests and young of Paradise fish. 3 bunches 50c.

MIKADO COLLECTION

(See Illustration below)

From old Japan, where for centuries goldfishes have been affectionately reared, comes the inspiration for this collection. The fancy types of goldfishes so popular with the Japanese are represented in this collection which includes 1 pair of young Japanese Veiltails, 1 pair of young Calico Veiltails, 1 pair of young Veiltail Moors, 1 pair of young Korean Fringetails and 1 pair of young Lionheads; also 1 oxygenating plant collection, No. 35B, suitable for an 18 gallon aquarium such as our No. 218 De Luxe Aquarium illustrated below.

5 pairs young fancy fishes
with plants,
a \$32.50 value **\$25**

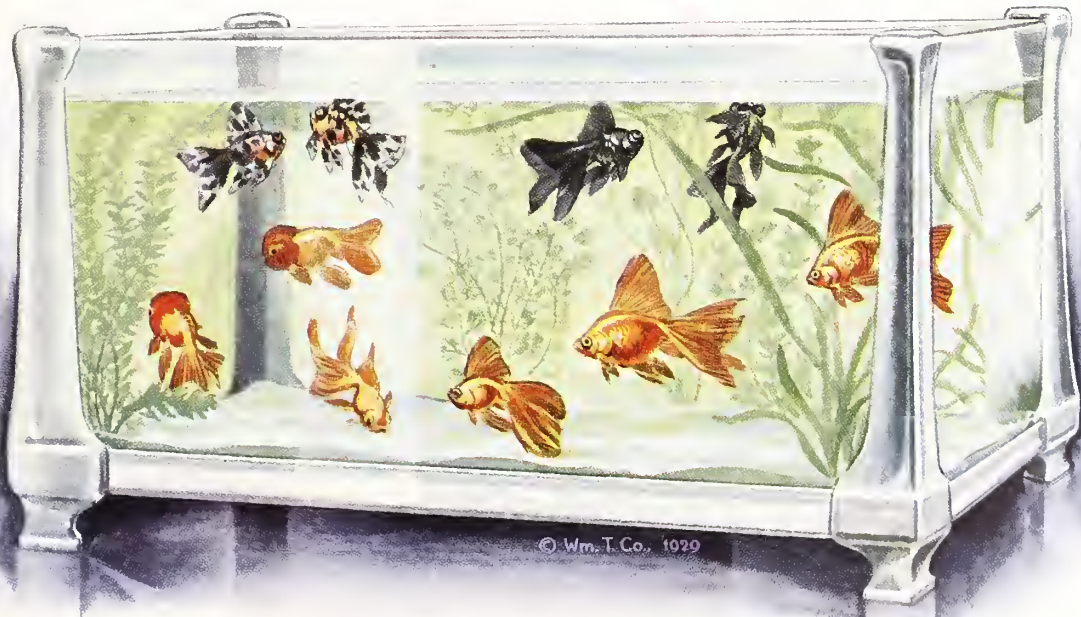
(Collection No. 30C)

TRICKER'S DeLUXE AQUARIUM

(As Illustrated)

A new style designed to please all who want a sturdy aquarium with refined and ornamental lines. This aquarium will fit in harmoniously with any scheme of furnishing and decorating. Cast aluminum frame, highly polished, supports glass sides without metal upper edge. The glass has bulb edge, a perfect finish to the aquarium. Four convenient sizes for either goldfishes or tropicals. (See page 47.)

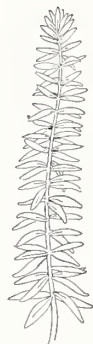
No. 218 De Luxe Aquarium is illustrated below. **\$22.50**
18 gal.



© Wm. T. Co., 1929



Types of Oxygenating Plants



Anacharis



Water Poppy



Cabomba



Sagittaria
Sinensis



Valisneria



Ludwigia

OXYGENATING PLANTS—Continued

SAGITTARIA SINENSIS. Dark green leaves; strong-growing plant. 3 plants 50c; \$1.50 per doz., \$10 per 100.

SAGITTARIA SUBULATA. Dwarf, 75c per doz., 100, \$5.

SALVINIA. Described under Floating Plants. 50c per portion. **SHELLFLOWER** (*Pistia stratiotes*). Blue-green leaves in the form of a rosette. 50c for 2.

SOUTHERN SPATTERDOCK. Broad, light green leaves; very ornamental. 50c for 3; \$1.50 per doz.

SPIRAL PALM. Like the Umbrella Palm in appearance but has more ornamental foliage. It is low growing and does well in shallow water. 35c each; \$1 for 3.

UMBRELLA PALM. This plant lends a touch of tropical atmosphere to the aquarium. Best grown in pots only partly immersed but will grow for a long time entirely submerged. 35c each, \$1 for 3.

UTRICULARIA MAJOR (Bladderwort). A beautiful, feathery plant like *Myriophyllum* but a much brighter green and dotted with small air bladders that keep the trailing stems near the surface. Grows well in shade. Good plant for spawning or protection. 50c a portion.

UTRICULARIA MINOR. Masses of green threads with very tiny air bladders. Commonly used for spawning fish like Rivulus and Haplochilus. 50c a portion.

VALLISNERIA. Long ribbon-like leaves. 75c per doz.; \$5 per 100.

WATER FERN. Leaves resemble garden lettuce. 3 bunches 50c.

WATER HYACINTH. Dark green leaves which are supported on the surface of the water by small bulbs. 50c for 3.

WATER POPPY. A very satisfactory ornamental plant that will bloom in the aquarium. Does best in pots of soil. 50c for 3; \$1.50 per doz.

WATER SNOWFLAKES. Floating leaf plants with feathery white flowers above the water. \$1 for 3; \$3 per doz.

COLLECTIONS

of oxygenating plants sufficient to balance aquariums of different sizes.

(Collection No. 35A)

SEVEN VARIETIES of aquarium plants including the best oxygenators, such as *Anacharis*, *Sagittaria*, and *Vallisneria* in sufficient quantity to balance a 10 gallon aquarium.

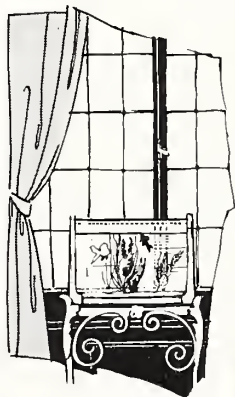
Postpaid\$1.10

(Collection No. 35B)

For 18 gal. aquarium—7 varieties described above..\$2

(Collection No. 35C)

For 30 gal. aquarium—9 varieties described above..\$3



Aquarium Supplies

In addition to furnishing the supplies listed here, we are also able to offer complete service on special equipment. We recently equipped Dr. Beebe's Bermuda Oceanographic Expedition with tanks, nets, aerating pumps and miscellaneous accessories. We will be glad to have you consult us if you are interested in special equipment of this kind.

CHEMICAL SHELLS. Water purifiers; contain chemicals which neutralize excess acid or alkali in the water, purifying it and destroying germs. The pink counter-act *Ichthophtherius*; the blue kills Pathogenic germs. 15c each; 2 for 25c.

AQUARIUM GRIT. Fine, white, silicon sand or fine gravel, thoroughly washed, for growing oxygenating plants. 10 pound bag for 12 gal. aquarium, 50c; 25 pound bag for aquariums up to 30 gal., \$1.

AQUARIUM CEMENT. Our own superior brand. Powder and oil to be mixed as needed. Quart carton, \$1 each; \$2.50 for 3.

AQUARIUM CLEANERS. Blade holder mounted on long extension handles for reaching any part of the glass. 50c each.

GLASS ROD BREEDING CAGES. 5 x 4 x 3 inches. Suspended in a small aquarium the cage may be occupied by ripe females of live bearing fish, spawning pairs of Danio or female Mouth Breeders that have hatched their eggs. \$2 each.

V-SHAPED BREEDING CAGES. 8 x 5 x 3 inches. Triangular with a narrow slot at the bottom for the escape of the young. \$1.50 each.

DIP TUBES. For removing sediment. 50c each.

AUTOMATIC RUBBER SYPHONS. Rubber tube with metal bulb which sucks water automatically. 75c each.

FEEDING RINGS. Floating rings of glass tubing that keep food from scattering. Complete with receptacle tray, 50c each.

GLASS FEEDING RING. With receptacle tray for catching food that would otherwise sink to the bottom. 50c each.

GLASS FEEDING RING. For Enchytrae worms. 50c each.

FLOATING THERMOMETERS. For temperature control in breeding tropicals or treatment of diseases. With bulb side, either Mercury or Spirit, 75c each. 6 inch, straight side, Mercury only, \$1 each.

EXTENSION SOCKETS AND CLIPS. For partial immersion of light bulbs in heating the aquarium. Bring lamp cord and regular snap socket to the aquarium, attach light by means of extension socket and hold in corner of aquarium with aluminum clip. 50c each; \$5 per doz.

NETS. For handling fishes. Quadrangular nets, 3 inch size, 25c each; 4 inch size, 35c each. 6 inch ring net for goldfishes, 75c each.

PLANTING TONGS. Very useful for working among the plants in the aquarium. Small size 50c each; large size 75c each.

ELECTRIC HEATERS. Adjustable to four different watts.

Guaranteed for one year. \$7.50.

TUFTSTONE ORNAMENTS. Very pretty in the aquarium or pool, although not quite as ornate as castles and similar objects. From \$1 up to \$25.

CA 30

Water Lilies
Aquatic Plants
Ornamental Fishes

[Send order to nearest office]

Date _____

Name _____

Street Address _____

City _____ State _____

Express Office _____

Give name of Express Office if different from Post Office

TERMS: Cash with Order. We do not Prepay Postage or Express Charges. No Goods sent C.O.D. Include 50c extra for shipping can with all Fish Orders. Fish **cannot** be sent by mail.

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(Over)

The WATER GARDEN in the HOME —

THOSE who have known the charm of gold-fishes, perhaps throughout the summer in a lily pool, look forward to the months of entertainment these pets provide in an indoor aquarium. Friends new to this hobby can know a new and ever-interesting delight in starting and maintaining a collection of pet fishes. For now, with good indoor aquariums so attractive and so little in cost, anyone can add this pleasure to his home.

The illustrations of beautiful fishes appearing in this issue will help you in selecting for your aquarium fishes which will delight you with their antics and with the life and beauty they give to the room.

"MIKADO" Collection

From old Japan, where for centuries gold-fishes have been affectionately reared, comes the inspiration for this collection. The fancy types of goldfishes so popular with the Japanese are represented in this collection which includes 1 pair of young Japanese Veiltails, 1 pair of young Calico Veiltails, 1 pair of young Veiltail Moors, 1 pair of young Korean Fringetails and 1 pair of young Lionheads; also 1 oxygenating plant collection, No. 35B, suitable for an 18 gallon aquarium such as our No. 218 De Luxe Aquarium illustrated below.

5 pairs young fancy fish with plants,
a \$32.50 value..... **\$25**

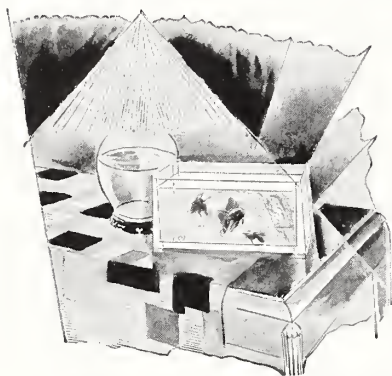
COLLECTION NO. 30C

No. 218 De Luxe Aquarium
18 gal. as illustrated... **\$22.50**



© Wm. T. Co., 1929

ORNAMENTAL FISHES Add Life and Animated Color in the Modern Home



Fishes offer constant entertainment and ever-changing beauty. They are the least troublesome, as well as quietest and cleanest of all pets.



IN the garden pool, or darting about in an aquarium indoors, fishes furnish a never-ending fascination for the eye. Especially in this day of color in the home, does the flash and gleam of color, as well as lively movement of bright hued fish in an aquarium, fit in the modern decorative plan.

It is our purpose to recommend to you and for your home some of the most beautiful and fascinating creatures in the world. Our ornamental fishes and oxygenating plants, when placed in the newly designed aquariums, which are manufactured in our factory at Independence, Ohio, will bring untold joy and beauty in your home.

Lovers of fishes who have pools need no introduction to the pleasure of keeping fishes as pets. They may, however, be wondering what to do with them through the winter. This folder answers that question and many others.

Fishes are, by far, the least troublesome pets to keep. Beyond occasional feeding there is practically no care or work about maintaining an aquarium. With a well balanced stock of congenial types of fishes and scavengers (snails, tadpoles, etc.) in an aquarium planted with oxygenating plants to keep the water clear and fresh, there is not even need to change the water for months at a time.

The indoor aquarium provides constant entertainment, ever-changing movement, never-ending interest. One comes to know and watch the personalities that even finny-folk possess—some friendly, some aggressive, others merely greedy or happy-go-lucky. There is the coquette and the anxious, worried mother of a lively brood. Life is varied, always interesting, in your aquarium.

Fishes from all over the World

Then there are so many interesting kinds of fishes to watch, along with the gay and gleaming gold fishes. You'll enjoy the fancy colored, oddly marked tropicals, some species bearing their young alive instead of hatching from eggs. The nest building fish; the handsome Jewel Fish

that cares for its young with motherly tenderness; and the curious Chinese Walking Fish are just a few of the odd and unusual varieties you may have.

We import tropical fishes from all parts of the world, and are ready to help you select the types of fishes, and also to advise you or answer questions about your fishes, their health and care, at all times.

These Interesting BOOKS Will Help

This folder can be little more than an introduction to this fascinating hobby. To know the full enjoyment of success with these pets, you will find real help, and entertaining reading as well, from a reference book or two—such as these recommended and which we can supply—all written by authorities.

GOLDFISH VARIETIES and TROPICAL AQUARIUM FISHES, by W. T. Innes, former president of the Philadelphia Aquarium Society. This is the only modern work in English that covers its subject comprehensively, dealing with various aquarium fishes, their care, habits, breeding, diseases, and relation to aquatic plants. One chapter is devoted to the construction of aquariums and concrete pools. New 1929 edition, 300 pages with 275 illustrations. \$4 a copy.

MODERN AQUARIUM, by W. T. Innes, author of "Goldfish Varieties," etc., listed above. A new book covering the breeding and general care of goldfishes and tropical fishes. 64 pages and 30 illustrations. \$1 a copy.

FISHES IN THE HOME, by Ida Mellen. A complete and authoritative book on the establishing and keeping of the indoor aquarium. A useful book; 180 pages and 63 illustrations. \$2.00 a copy.

THE WATER GARDEN, by Peter Bisset, is an excellent work dealing with the culture of water lilies and other aquatic plants, as well as the arrangement of perennials, shrubs, and evergreens for the borders and backgrounds of pools. 210 pages of interesting text profusely illustrated. \$5 a copy.



Dwarf Gourami building bubble nest.

WATER LILIES and POOLS



We issue a complete illustrated catalog of water lilies and water plants. Tells how to make pools and how to grow lilies. Copy sent on request.

Copyright Wm. Tricker, Inc., Saddle River, N. J.

Unusual GOLDFISHES Rich in Color



ON this page and the next we illustrate a few of the most striking types of goldfishes. It has taken years of selective breeding to produce these beauties. The Japanese, Koreans and Chinese have bred goldfishes for at least two thousand years, ever striving to develop new types. Thousands of goldfishes must be bred to produce a few perfect specimens. Fortunately, modern commercial breeding now makes it possible for all to have these beautiful fishes in pool or aquarium.

The illustrations, in color, show several different perfect types sought in breeding fancy goldfishes, but perfection is attained only in rare instances. Perfect specimens of the various types often bring as high as \$50 to \$200 on the market, so scarce are they. The general run of goldfishes approximates these types in shape, coloring and fin development when fully developed. They are not, of course, prizewinners, but exceedingly beautiful just the same.

SELECTED GOLDFISHES. Brilliantly colored and active. A fine strain selected for beautiful markings in black, white, red and silver.

2-4"—\$1.50 for six; \$2.50 a doz.

4-6"—\$1 for three; \$3.50 a doz.

6-8"—\$1 each; \$10 a doz.

COMET TAILS. Like selected goldfishes in coloring, but with longer graceful fins and tails. Their rapid movement adds animation in aquariums. (See illustration in color below.)

3-5"—\$1 a pair; \$5 a doz.

6"—\$1.50 a pair; \$7.50 a doz.

JAPANESE CALICO FISHES (Shubunkin). The Japanese name "Shubunkin" means "Autumn Brocade." This is a fitting name, for the fishes are marked in a brocade pattern of glorious colors, like the autumn foliage, and even more varied. Blue is the predominating color, with mottled effects in red, gold, black, brown, lavender and white.

The active movement of the Shubunkin gives fine display of these colorings. It is a fine fish for aquarium or garden pool, having great vitality.

3-4"—\$1 a pair; \$5 a doz.

4-5"—\$2 a pair; \$8 a doz.

5-6"—\$3 a pair; \$12 a doz.

CALICO FRINGETAILED. Brilliantly mottled in blue, yellow, gold, silver, red and black, similar to the Japanese Calico Fish. A showy companion for the Korean Fringetail. (See illustration in color below.)

\$5, \$7.50 and \$10 a pair.

CALICO FANTAILS. Marked like Shubunkin (Japanese Calico Fish) but with divided tail.

\$3 a pair; \$12 a doz.

KOREAN FRINGETAILED. The Korean Fringetail has a proud and haughty manner, and rightfully, for it is a real beauty. Seen in the aquarium, it inspires exclamations of delight. Colored deep red, sometimes with black or white markings. Selective breeding has developed two complete tails spreading out fanwise, and in the larger fishes, very graceful and drooping. (See colored illustration below.)

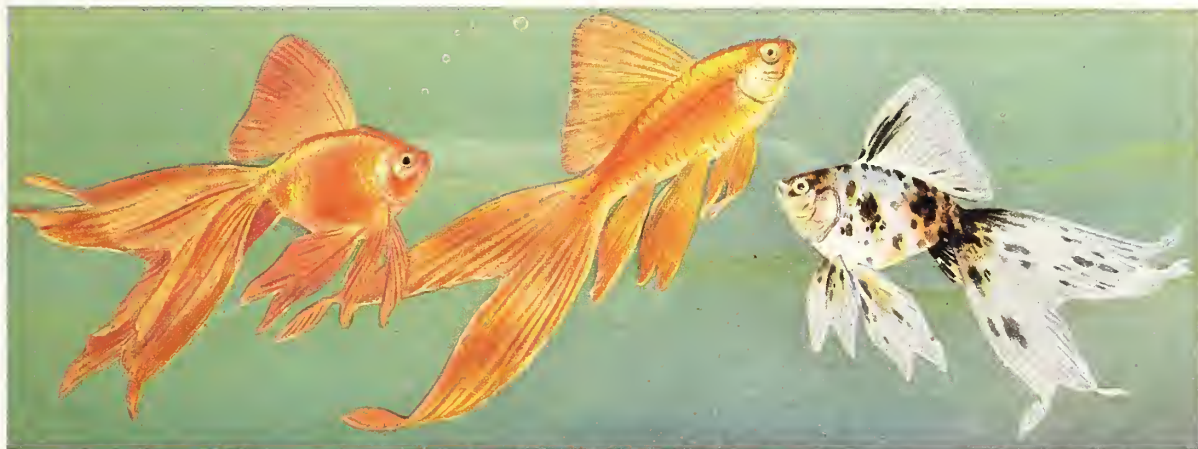
\$3, \$5, \$7.50, \$10 a pair.

JAPANESE FANTAILS. Similar to Korean Fringetails but smaller, with shorter and less perfectly formed tails. Gold, white and black markings.

\$2 a pair; \$8 a doz.

Chinese Telescopes

The weird startling features of Chinese art are suggested in this curious fish, with its protruding eyes. The telescope eyes have been bred into fish of all colors, but it has been found impossible to develop any black fish (Moors) without the telescope eyes.



KOREAN FRINGETAIL

COMET TAIL

CALICO FRINGETAIL



VEILTAIL JAP

VEILTAIL MOORS

LIONHEAD

GOLDFISHES—Continued

TELESCOPE MOORS (Black). This all black Chinese fish is highly prized and makes striking color contrast among brighter colored fishes.

\$2, \$3 and \$5 a pair.

TELESCOPE REDS. This Chinese type is noted

for its highly brilliant color and protruding eyes. An oddity in any aquarium.

\$2 and \$3 a pair.

Veiltail Fishes

Of Japanese origin, these are the highest development of goldfish, with transparent scales and colors of the rainbow. The fins and tail are double, and long, flowing and graceful. All are prized by fish fanciers.

The secret of developing good Veiltails is constant and careful selection and breeding. Our Veiltails are raised by qualified experts.

It is difficult to quote exactly on Veiltails as they vary in form, coloring and marking. We try to meet your preference as near as possible.

BROADTAIL TELESCOPE CALICOS. Veiltailed fishes like the Shubunkin, with blue, red, black and white markings, and protruding eyes. \$7.50 to \$15 each.

VEILTAIL JAPS. Without protruding eyes. All the beauty of the true Japanese goldfish in the graceful veiltail form. (See illustration in color above.) \$7.50 to \$15 each.

YOUNG VEILTails. Can be had at \$2 to \$4 each; \$8 to \$30 a doz., according to size and quality.

VEILTAIL MOORS. Black telescope, protruding-eye fishes in this graceful form. (See illustration in color above.) \$7.50 to \$15 each.

LIONHEADS. Another Oriental novelty, differing from the other fishes in having no dorsal or back fin. With its short fantail it swims with a waving movement. The name arises from a peculiar hooded growth about the head that develops when the fish is several years old, giving the appearance of a lion or buffalo head. Perfectly hooded specimens range in value from \$100 to \$150. Our prices are low considering the rarity of this species and the possibilities of developing specimens of great value. (See illustration in color above.)

One year Lionheads, \$7.50 per pair.

Two year Lionheads, \$15 to \$25 per pair.

Collections of Goldfishes—



As the ideal selection for the aquarium is really a collection, we are offering these attractive groupings of the most interesting and desirable goldfishes.

VEILTAIL COLLECTION

(No. 30B)

One pair each of Calico Telescopes, Veiltail Moors, Calico Japs and Lionheads. 8 beautiful specimens with plants and scavengers (Col. No. 34F) suitable for 30 gal. aquarium. \$47.50 value.....\$40

ORNAMENTAL COLLECTION

(No. 30A)

One pair each of Fantails, Telescopes, Moors, Comets, Albinos and Calicos. One pair Japanese Snails. One doz. Black Ramshorn Snails, and shipping can\$12

MIKADO COLLECTION

(No. 30C)

One pair each of young Calico Veiltails, Veiltail Moors, Jap Veiltails, Fringetails and Lionheads; with Oxygenating Plants (Col. No. 35B), suitable for 18 gal. aquarium. Illustrated on page 1. \$32.50 value for\$25

GINGHAM COLLECTION

(No. 30H)

"Six Little Rompers"—one pair each of Calico Shubunkins, Calico Fantails and Calico Telescopes; with 2 Neptune Chemical Purifiers, 1 box O'Brien Fish Food, and shipping can. \$7.50 value.....\$6

It is EASY to Care for Fishes —

The Balanced Aquarium

THE ideal indoor aquarium is any size large enough for growing a number of aquatic plants in the water to provide oxygen needed by the fishes. In the aquarium provided with plants and with scavengers (snails, tadpoles, etc.) the water need rarely be changed. Snails and clams keep the glass and water clean; the roots of the plants absorb products of decomposition; and the only attention you need give is the feeding.

The rule for goldfishes is one gallon of water, or 20 square inches water surface for each inch of fish body. If less, part of the water should be changed frequently, especially whenever fishes gasp at the surface. The cooler the water the more air it holds. Repeated changes of temperature are injurious to the fishes. Tropicals should be kept at even temperature, not lower than 70 degrees Fahrenheit. A few of the tropical fishes, such as the 45 Degree Collection, will stand cooler water. In planted aquariums, many more tropicals than goldfish can be accommodated.

Feeding

In our laboratories we prepare foods that contain a balanced ration of vitamins and nutrient essential to the growth and vitality of all ornamental fishes. A description of these foods is on page 11.

Goldfishes should be fed 3 times a week. Feed Tropical Fishes each day, but only as much as they will consume in 15 minutes.

The ordinary wafer food commonly sold is deficient in nourishment and should be used only in connection with the foods we recommend here, if at all.

Waste food in the aquarium will cause trouble and should be removed by a dip tube or siphon.

Winter Care of Outdoor Fishes

If you already have fishes in a garden or outdoor pool, take them indoors before the weather turns cool. If there are more fishes than your indoor aquarium will accommodate, the balance may be stored through the winter. Keep them in a tub in the basement where it is not too dark. A slight drip from a faucet will keep the water fresh and the fishes alive. Only occasional feeding will be necessary.

By all means keep the beautiful tropical fishes in an aquarium in winter. They are too fascinating to be stored out of sight. The fishes should be removed from the pool before the temperature falls much below 60 degrees. If they are left outdoors too late in Fall they become over-stimulated and often droop and die when brought indoors. On request we will furnish a leaflet telling how to prepare pools for the winter.

We Ship at all Seasons —

Read These Instructions Carefully

AN INVITATION—At Saddle River, N. J., and Independence, Ohio, we import and stock more than 100 varieties of Ornamental Fishes and Scavengers, as well as a complete line of Aquatic and Oxygenating Plants, Aquariums, Foods, Remedies and Supplies. We are glad to welcome visitors at all times. Our display aquariums will be a source of great interest and delight. One of these aquariums is illustrated on the right.

TERMS—We accept orders only when accompanied by funds sufficient to cover the price of the goods, and 50 cents extra for shipping pail when fish are included. Shipments by **Express, collect**. We **do not** prepay Express charges. Fishes **cannot** be sent by mail. Orders should be sent to our plant nearest you.

GUARANTEE—We promise safe arrival of your orders when permitted to exercise our judgment as to proper time of shipment.

This applies to fishes, aquarium plants and supplies, any time of the year. With special shipping cans, insulated against cold, we are shipping tropical fishes successfully at all seasons, but **we guarantee safe arrival ONLY from June to October!** Shipments of tropicals at other seasons are at customer's risk. (A deposit of \$3 is required to insure return of insulated can.) We reserve the privilege of replacing stock found defective, instead of refunding.

NOTE—We **DO NOT PAY EXPRESS** charges on original orders or on replacements. We will replace any stock found defective, if inspected upon arrival in presence of local express agent, and if a Bad-Order Report, signed by the agent, is forwarded to us at once.

CARE AFTER SHIPMENT—Fishes are sometimes weakened or injured by rough handling in transit, making them susceptible to attack of unfriendly organisms in the strange water of your aquarium.

Keep them a day, without food, in a shallow bath of Turke Island Salt, or preferably a weak solution of German Fungus Cure (1 tablespoon in 5 gallons of water) until active and healthy again. Tinting this bath faintly with Permanganate of Potassium or Ichthyophthirius cure



A display aquarium; one of the many in our new show room at the Independence plant.

will help in case of injury. **DO NOT** put snails, turtles, or salamanders in a salt bath.

ADVISORY HELP FREE

We gladly answer questions. Feel free to write us any time regarding **fish culture**, or the **making of pools and growing of water plants**.

Your inquiries will receive the personal attention of our Aquarists, J. W. Doscher, at Saddle River, N. J., and J. T. Charleson, at Independence, Ohio.

TROPICAL FISHES Rare and Beautiful —

The Most Interesting of all Aquarium Fishes



THESE exquisite toy tropical fishes will be at home in any aquarium. They are so brilliantly colored and have such unusual forms and habits that they are a constant fascination. We have gathered them from all over the

world and our collection includes some of the most interesting and beautiful fishes discovered in Mexico, Brazil, Africa, India, China and other far countries.

We are introducing new varieties of fishes each year. This year we are introducing a distinct new fish which will be the jewel of your aquarium—the Betta Trickeri of beautiful blues, red, greens and many other colors. (See illustration in color, page 8.) You can enjoy many varieties of tropical fishes in your own home. They are small in comparison with goldfishes, so many more of them can be accommodated in the average size aquarium, adding new beauty and interest. Try a few pairs and experience some of the delights known to the experienced fish fan.

Most of these fishes are illustrated in color on pages 7 and 8. The numbers after the name of each fish identify the variety on the illustrations.

Live Bearing Fishes

These varieties do not spawn, but give birth to live young at frequent intervals.

From Mexico and Central America:

MEXICAN SWORDTAILS (19). Most popular tropical, orange tail. \$2 pr., \$8 doz.

CRESCENT SWORDTAIL. Like Mexican, with orange band; crescent at base of tail. \$3 pr., \$7.50 six, \$12 doz.

HYBRID HELLERI (8). Red or black with metallic blue sheen. Either color \$3 pr., \$7.50 six, \$12 doz. Large, \$5 pr., \$12 six, \$20 doz.

RED HELLERI (36). Ruby red, faint orange striped. \$1.50 ea., \$7.50 six, \$12 doz. Large \$2.50 ea., \$12 six, \$20 doz.

MOONS (Platyti). Brilliantly colored.

Blue (2). Ultramarine, bars of navy.

Gold (10). With crescent markings.

Gold, Plain. Called German Platyti.

Black. Jet black, some with blue sheen.

Red (9). Few dark spots on sides.

CHOICE of above: \$2 pr., \$5 six, \$8 doz.

PURE RED MOONS (23). Solid red, no marks. \$3 pr., \$7.50 six, \$12 doz.

RAINBOW FISH (16). Beginner's favorite. \$1 pr., \$2.50 six, \$4 doz.

From Our Southern States:

SAILFINS (3). Hardy, and interesting. \$2 pr., \$5 six, \$8 doz. Large, \$3 pr., \$12.50 six, \$20 doz.

BLACK MOLLINIENISIA (30). Jet black, glistening scales. \$3 pr., \$8 six, \$15 doz.

BELONEXOX BELIZANUS (34). Rare iridescent fish resembling pickerel, large mouth, likes live food. \$10 pr.

GAMBUSIA HOLBROOKI. Beautifully marked, often jet black. \$1 pr., \$3 six, \$5 doz.

HETRANDIA FORMOSA. Smallest live-bearing fish, 50c pr.

Collections of Tropical Fishes —

THE most successful way to become acquainted with the Toy Tropical Fishes is to start with a few varieties such as are offered in these collections. Then you are sure of getting a well chosen selection which will live and thrive peaceably together.

For the beginner especially we recommend the purchase of a copy of Innes' "Modern Aquarium," listed on page 2.

LIVE BEARING COLLECTION, No. 52. One pair each of six varieties of fish that bear their young alive. Swordtails, Rainbows, Sailfins, Moons and Black Molliniensis. For 12 gal. aquarium. With shipping can, all for\$10

NOVELTY COLLECTION, No. 50. One pair each of Chinese Walking Fish, Paradise, Mexican Swordtails, Jewel Fish, Japanese Weather Fish and American Flag Fish, and shipping can. For 18 gal. aquarium.....\$12

FISHERMAN'S LUCK, No. 54. Our choice of six pairs of interesting tropicals. Better than if you pick them. Suitable for 12 gal. aquarium.....\$10

HARMONY COLLECTION, No. 51. One pair each of seven varieties, our selection. Usually includes Swordtails, Moons, Barbs, Danios, Flag Fish, Fundulus, Silver Tetra, Chaetodon. May be accommodated in 12 gal. aquarium. With shipping can for\$12



45 DEGREE COLLECTION, No. 53. One pair each of six varieties that will stand reasonably low temperatures and may be kept with goldfishes. Includes Sailfin, American Flag Fish, Chaetodon, Cardinals, Medakas, Barbs, Fundulus and Weather Fish. For 18 gal. aquarium. With shipping can for.....\$12

THE TRICKER COLLECTION, No. 58. One pair each of Orange Swordtails, Pure Red Moons, Dwarf Gourami, Three-spot Gourami, Betta Cambodia, Red or Blue Hybrids and Danio Malabaricus, 4 Red Coral Snails. For aquarium No. 218. \$26 value for.....\$20

THE BEGINNER'S COLLECTION, No. 57. One pair each of Mexican Swordtails, Red Moons, Silver Tetra, Zebra Fish, Blue Moons, Paradise, Rosy Barbs, Rainbow Fish, Red Coral Snails and Jap. Snails. Book on care of fish, Eureka aquarium No. 112, plants, white sand, one box each of Dried Shrimp and O'Brien Fish Food, thermometer, socket and clip for heating. \$32.50 value for\$22.50
With De Luxe aquarium No. 211, \$4.00 extra.

THE O'BRIEN COLLECTION, No. 56. One pair each of twenty Tropicals shown in color on page 7 (except No. 20). Suitable for 30 gal. aquarium (No. 230) or in two or three smaller. 40 fishes in all. \$42.50 value for \$35.



Listed below are the names and page references of these tropical fishes.

LIVE BEARING VARIETIES

- (2) Blue Moons, page 6.
- (3) Sailfins, page 6.
- (8) Hybrid Helli, page 6.
- (9) Red Moons, page 6.
- (10) Gold Moons, page 6.
- (16) Rainbow Fish, page 6.
- (19) Mexican Swordtail, page 6.

BUBBLE NEST BUILDERS

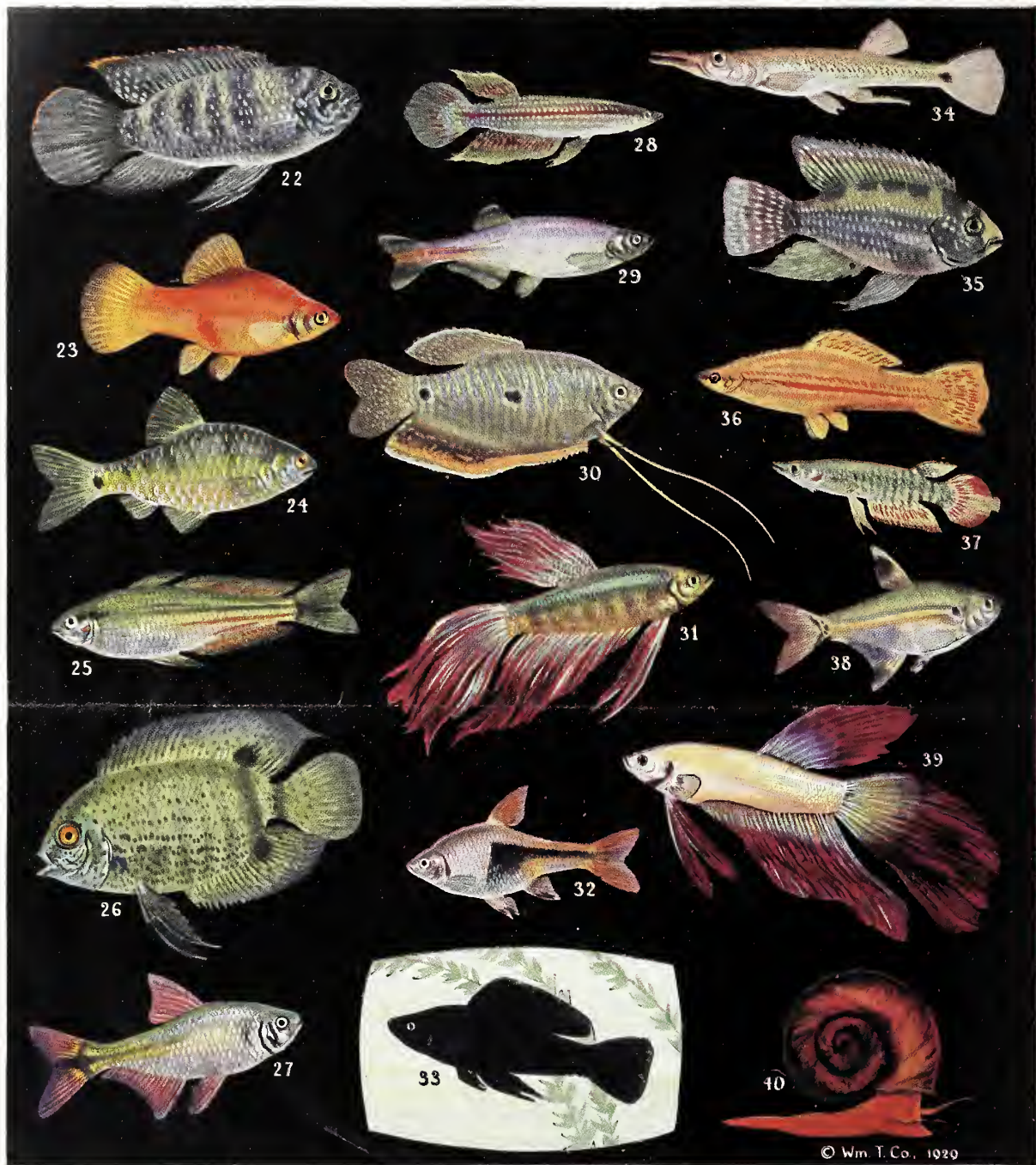
- (1) Dwarf Gourami, page 9.
- (7) Paradise Fish, page 9.

CICHLIDS

- (15) Orange Chromide, page 9.
- (20) Jewel Fish, page 9.
- (21) Angel Fish, page 9.

MISCELLANEOUS

- (4) Tetra von Rio, page 9.
- (5) Cardinal Fish, page 9.
- (6) Silver Tetra, page 9.
- (11) Flying Barb, page 9.
- (12) Zebra Fish, page 9.
- (13) Rosy Barb, page 9.
- (14) Giant Danio, page 9.
- (17) American Flag Fish, page 9.
- (18) Golden Fundulus, page 9.



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Listed below are the names and page references to subjects illustrated.

LIVE BEARING VARIETIES

- (23) Pure Red Moons, page 6.
- (33) Black Mollienisia, page 6.
- (34) Belonesox Belizanus, page 6.
- (36) Red Helli, page 6.

SNAILS

- (40) Red Copenhagen, page 10.

BUBBLE NEST BUILDERS

- (31) Betta Trickeri, page 9.
- (39) Betta Cambodia, page 9.
- (30) Three Spot Gourami, page 9.

CICHLIDS

- (22) Blue Acara, page 9.
- (26) Heros Spurius, page 9.
- (35) Geophagus Braziliensis, page 9.

MISCELLANEOUS

- (25) Australian Rainbow Fish, page 9.
- (24) Striped Barb, page 9.
- (29) Pearl Danio, page 9.
- (27) Tetra Von Buenos Aires, page 9.
- (38) Pristella Ridley, page 9.
- (37) Haplochilus Rubrostigma, page 9.
- (28) Haplochilus Von Madras, page 9.
- (32) Rashora Heteromorpha.

Bubble Nest Builders

From East Indies and Southern Asia:

Males of these fishes build a nest of air bubbles on the surface, under which the eggs hatch. Also called **Labyrinth Fishes**.

BETTA TRICKERI (31). First offering of this new variety, our own development. Long fins, blue, green, red and maroon. Medium size. \$5 pr.; Large, \$7.50 pr.; Extra large, \$10.

BETTA CAMBODIA (39). Veiltailed Siamese Fighting Fish. \$5 pr. Large, \$7.50 pr.

PARADISE FISH (7). Brilliantly colored, hardy, stand temp. low as 40 degrees. Eat water insects, mosquito larvae. \$2 pr., \$5 six, \$8 doz. Large, \$3 pr., \$7.50 six, \$12 doz.

POLLIES (Polyacanthus Dayi). Resemble Paradise fish but smaller and more active. \$2 per pr.; \$5 for six; \$8 per doz.

DWARF GOURAMI (1). A little gem. \$3 pr., \$8 six, \$15 doz.

THREE-SPOT GOURAMI (30). Iridescent, with black spot at base of tail and on body; eye forms third spot. \$3 pr., \$8 six, \$15 doz.

STRIPED GOURAMI (Colisa Fasciatus). Larger than Dwarf Gourami and more richly colored. \$5 per pair.

CROAKING GOURAMI (Ctenops Vittatus). A novelty. Male produces croaking sound when courting. \$5 pr.

CHINESE WALKING FISH. Channa, most interesting and one of largest Labyrinth fishes with lungs in place of gills. Comes to surface often to breathe. Out of water, will walk on damp cardboard or concrete. 6 to 10 in. long, olive-brown with silver dots. Adult mated pair, \$5. Young \$2 pr., \$5 six, \$8 doz.

Cichlids

From Africa and South America:

Strong parental instinct in guarding eggs and the young.

JEWEL FISH (20). Striking color and marking. Mated pairs, \$5.

ORANGE CHROMIDE (15). A new and showy fish. Mated pairs, \$3.50.

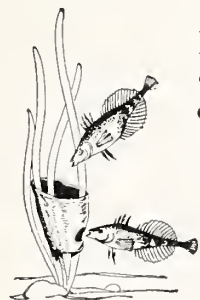
BLUE ACARA (22). Steel blue, fins edged red. Mated pairs, \$6.

STRIPED ACARA (Acara Portalegrensis). Marked with stripes; change according to mood of fish. Spawns every few weeks. Mated pairs, \$5.

HEROS SPURIUS (26). Shy; colored warm brown, turning to dark green or black. Mated pairs, \$5.

ANGEL FISH (21). King of all aquarium fishes. Striking color and shape. 1 year, \$5 a pair; 2 year, \$10 a pair; Breeders, \$25 a pair.

GEOPHAGUS BRAZILIENSIS (28). A colorful fish from the waters of Brazil. Medium size, per pair, \$2; mated pairs, \$3.50.



Some hardy fishes, neither tropicals nor goldfishes, but all very interesting. Will stand cool temperatures.

CHAETODON (The Poor Man's Angel Fish). Like Angel Fish (21) without long wings. Kept with goldfishes. \$2 pr., \$8 doz.

CARDINAL FISH (5). Grows to three inches. Male develops brilliant coloring. \$1 pr., \$4 doz.

NEST-BUILDING STICKLEBACKS. Builds a nest of twigs and plants. Easy to keep in the aquarium. \$1 pr., \$3.50 doz.

Miscellaneous Tropicals

AUSTRALIAN RAINBOW FISH (Melanotaenia nigrans) (25). Lively in movement, lively in color. Brilliant rainbow hues, hardy, not particular as to food. \$3 a pair; \$7.50 for six; \$12 a doz.

BARBS. From India. Spawn on water plants like goldfishes.

ROSY BARB (13). Large, glistening scales. \$2 pr., \$5 six, \$8 doz.

STRIPED BARB (24). Green, gold, brown, black bars. \$2.50 pr., \$6 six, \$10 doz.

FLYING BARB (11). Very active; can leap out of water. \$1.50 pr., \$4 six, \$6 doz.

DANIOS. From India. Popular for active movements and flash of color.

ZEBRA FISH (12). Horizontal stripes of blue and yellow. \$1.50 pr., \$4 six, \$6 doz.

PEARL DANIO (29). Iridescent mother-of-pearl effect. \$2 pr., \$5 six, \$8 doz.

GIANT DANIO (14). A beauty. \$3 pr., \$7.50 six, \$12 doz.

CHARACINS. From South America.

TETRA VON RIO (4). Brilliant, very tiny fish, rarely over 1 inch. \$3.50 pr., \$6 six, \$10 doz.

TETRA VON BUENOS AIRES (27). Larger than the Von Rio, less brilliant. \$2.50 pr., \$6 six, \$10 doz.

SILVER TETRA (6). Silver scales, green-blue sheen. \$2 pr., \$5 six, \$8 doz.

PRISTELLA RIDLEI (38). Tiny Tetra, red, black, white and yellow barred. \$3 pr., \$7.50 six, \$12 doz.

CYPRINODONTIDAE. Southern Europe, Asia, Africa and South America.

AMERICAN FLAG (17). Oddly marked. \$2 pr., \$5 six, \$8 doz.

GOLDEN FUNDULUS (18). Very active. \$2 pr., \$5 six, \$8 doz.

HAPLOCHILUS RUBROSTIGMA (37). Long, with green and gold dots. \$3 pr., \$7.50 six, \$12 doz.

HAPLOCHILUS VON MADRAS (35). Small green fish, gold and red dots. \$3 pr., \$7.50 six, \$12 doz.

RASBORA HETEROMORPHA. A beautiful and very rare fish. \$10 per pair.

Peaceable Fish which get along well together in the same aquarium.

Swordtails	Angel Fish	Danios
Moons	Chaetodon	Characins
Sailfins	Cardinals	American Flag
Black Mollienisia	Rasbora	Fundulus
Dwarf Gourami	Barbs	Haplochilus

Unusual Fishes for the Aquarium—

PEARL ROACH. Pearly scales, red fin. \$1 pr., \$2.50 six, \$4 doz.

BLACK BULLHEADS. Jet black, long whisker-like feeler. Will live with goldfish. \$1 pr., \$2.50 six, \$4 doz.

FIELD STREAM COLLECTION, No. 45.

1 pair each of Chaetodons, Cardinal Fish, Pearl Roach, Black Bullheads; 2 Jap Snails, 2 Coral Snails; including shipping can. All for.....\$5.50

OXYGENATING PLANTS for the Aquarium



Ludwigia

INSURE proper living conditions for your fish by planting the aquarium with oxygenating plants, which absorb impurities in the water and liberate oxygen for the fishes. This provides a balance of plant and fish life in the aquarium. Balanced aquariums have kept in condition for two years, without change of water.

Oxygenating plants chiefly benefit the fish, but also make the aquarium more attractive. The green leaves contrast pleasingly with the flashing colors of the fish.

We offer plants and collections of varieties to balance any aquarium. *Vallisneria*, with long, ribbon-like leaves; *Sagittaria*, a strong-growing plant with dark green leaves, one of the best oxygenators known; *Salvinia*, a floating plant; and many others.

Place an inch or two of washed sand in the bottom and plant *Vallisneria* around sides and back; *Sagittaria* in front of the *Vallisneria*, and bank sprigs of other plants in corners and other points for ornamental effect, letting *Salvinia* float.

VALLISNERIA. The old standby. 75c doz., \$5 per 100.

SAGITTARIA (Broad Leaf). Keeps the sand fresh. 50c for 3; \$1.50 per doz., \$10 per 100.

SAGITTARIA SUBULATA. Dwarf plant. 75c doz., \$10 per 100.

ANACHARIS. The most active oxygenator. 50c for 3 bunches; \$1.50 per doz.

LUDWIGIA. Highly ornamental. 50c for 3 bunches; \$1.50 doz.

WATER POPPY. The only practical flowering aquarium plant. 50c for 3 plants; \$1.50 doz.

FLOATING ELODEA. An ideal cover for young tropical fishes. 50c per portion; \$2 per pound.

HAIR GRASS. Dwarf; will carpet aquarium with 2 to 3 inches of grass needles. Protects eggs and young fish. \$1 for 25 plants.

CRYPTOCORYNE. Graceful dark green leaves like Spatterdock. Thrives well in shadow. 75c each, \$2.00 for 3, \$7.50 doz.

GREENHOUSE SPATTERDOCK. Broad light green leaves. 35c ea., \$1 for 3.

WATER LILY. Young plant, graceful green leaves. Will thrive in sunlight and may bloom. 75c ea.

COLLECTIONS

Collections of oxygenating plants sufficient to balance aquariums of different sizes.

COLLECTION 35A. Seven different varieties of aquarium plants, including the best oxygenators, such as *Anacharis*, *Sagittaria* and *Vallisneria*. A sufficient quantity to balance a 10 or 12 gallon aquarium. Postpaid\$1.10

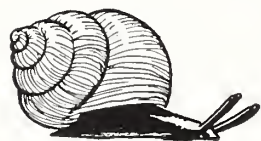
COLLECTION 35B. Seven varieties as described above. Sufficient for an 18 gallon aquarium\$2

COLLECTION 35C. Nine varieties as described above. Sufficient for a 30 gallon aquarium\$3



Water Poppy

SCAVENGERS to Keep the Aquarium in Order—



SERVANTS who work without pay and who will keep the aquarium home in order and the water clear and pure. A few scavengers are necessary in the balanced aquarium. Scavengers will faithfully execute their allotted tasks. Snails clean the glass and

devour decaying vegetation; salamanders and tadpoles remove excess food; weather fish cultivate the sand around the plants; clams are natural filters and keep the water clear.



Weather Fish

	Pair	Doz.
JAPANESE LIVE BEARING SNAILS.....	50c	\$2.00
CORAL SNAILS (Copenhagen Red) Very beautiful. See illustration No. 40, page 8.....	50c	2.50
RAMSHORN SNAILS	25c	1.00
AFRICAN SNAILS	50c	1.00
MELANTHO OR TRUMPET SNAILS.....	25c	1.00
AMERICAN SALAMANDERS	50c	2.00
JAPANESE SALAMANDERS	75c	3.00
BABY GEOGRAPHIC TURTLES.....	75c	3.00
WEATHER FISH	\$2.00	8.00
TADPOLES		1.00
FRESH WATER CLAMS.....	50c	2.00
ASSORTED SNAILS		1.50
AUSTRALIAN RED SNAIL.....	50c	2.00

COLLECTIONS of PLANTS and SCAVENGERS

COLLECTION No. 34A. For aquarium or small pool. Half dozen each of Tadpoles, Jap. Snails, Black Ramshorn, two Clams and a pair of American Salamanders, with shipping can\$2

COLLECTION No. 34D. For 10 gallon aquarium. 5 varieties of plants, one Salamander, a pair each of Jap, Coral and Ramshorn Snails.....\$2

COLLECTION 34E. For 19 gallon aquarium. Sufficient plants in 7 varieties, one pair Salamanders, 4 Jap, 4 Coral Snails\$3.50

COLLECTION 34F. For 30 gallon aquarium. Sufficient plants in 9 varieties, one pair Salamanders, 6 Jap, 4 Coral, 12 Ramshorn Snails, one pair Clams, 6 Tadpoles\$5

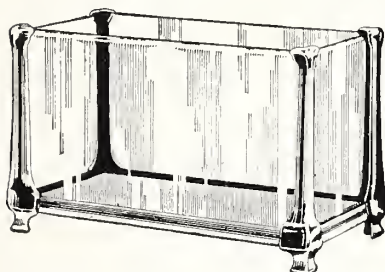
L. W. Ramsey Company, Davenport, Iowa

New Designs in ORNAMENTAL AQUARIUMS

ATTRACTIVELY designed aquariums will harmonize well with the furnishing of any room and add to the room's beauty. It is possible to make the aquarium the most interesting and ornamental spot in the whole house, the center of attention for children, for yourself and guests.

We manufacture our own aquariums and are this year introducing new designs with new beauty. The styles and sizes are standard and economical. The prices are F. O. B. either Independence, Ohio, or Saddle River, New Jersey, by express or freight.

Tricker's DE LUXE AQUARIUM



A new style designed to please all who want a sturdy aquarium with refined and ornamental lines. This aquarium will fit in harmoniously with any scheme of furnishing and decorating. Cast aluminum frame, highly polished, supports glass sides without metal upper edge. The glass has bulb edge, a perfect

finish to the aquarium. Four convenient sizes for either goldfishes or tropicals. See illustration in color on page 1.

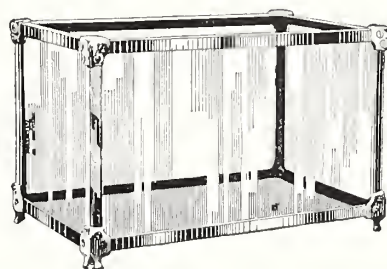
No. 206—16x9x10—6 gal.\$10.50
With plants and scavengers, \$1.50 more.

No. 211—20x11x12—11 gal.\$15.00
With plants and scavengers, \$2 more.

No. 218—24x12x14—18 gal.\$22.50
With plants and scavengers, \$2.50 more.

No. 230—31x14x16—30 gal.\$45.00
With plants and scavengers, \$3.00 more.

No. 230 has reinforcing bars across top, and metal base bottom for additional strength.



The EUREKA AQUARIUM

An economical aquarium for all purposes. Double strength glass, slate bottom, ornamental aluminum feet, 1/4 inch angle drawn aluminum corners. Readily kept attractive looking. Four convenient sizes.

No. 105—15 1/4 x 8 x 10—5 gal.\$7
With plants and scavengers, \$1.50 more.

No. 107—17 1/2 x 10 x 16—7 gal.\$8.50
With plants and scavengers, \$1.75 more.

No. 112—20 1/2 x 12 x 12—12 gal.\$11
With plants and scavengers, \$2 more.

No. 120—24 1/2 x 13 1/2 x 13 1/2—20 gal.\$16
With plants and scavengers, \$3 more.

Window Display AQUARIUM

Especially designed for windows. Has polished angle aluminum frame, slate bottom. Reinforced on bottom with polished aluminum bars. Very attractive and ornamental. Glass partitions may be put in these aquariums for separating different varieties of fish. A very popular type.

No. 510—30x8x10—10 gal.\$15
With plants and scavengers, \$2 more.

HANDY AQUARIUMS. For pairs of tropical fishes or young fishes. Dull green frames and glass bottoms.
10x6x7—1 1/2 gal.\$1.50

We quote prices on large aquariums or on special sizes upon request.

Tricker's Dependable Fish Foods and Supplies—

These foods are prepared or tested in our laboratory by our Chemist and have proven satisfactory for both young and mature fish.

In-Nur-Co. A balanced ration for goldfish, of prepared cereal and meat. 2 oz., 20c; \$1 lb.

The O'Brien Fish Food. For tropicals and goldfishes. Containing vitamins and necessary elements for growth and health of fish. 1 oz., 20c; 2 oz., 30c.

Tonic Fish Food. For fish in poor condition; accelerates growth of young and induces breeding. 1 oz., 20c; 2 oz., 40c.

Hygiene Baby Fish Food. A food specially prepared for young and growing fish. 35c a tin.

Dried Shrimp. Concentrated everyday food; meat of sea shrimp. 2 oz., 20c; \$1.00 lb.

Dried Daphnae. Carcasses of tiny crustaceans or water fleas. Natural sustenance for all baby fish. 2 oz., 35c; \$2 pint; \$3.50 quart.

Enchytrae Worms. Small thread-like worms, year 'round living food for tropicals. Single portion, 60c; double, \$1.

Infusoria. Feed a Walking Fish raw meat and it produces the Paramecium type of infusoria, a food for all newly hatched fishes.

Chemical Shells. Water purifiers; contain chemicals which neutralize excess acid or alkali in the water, purifying it and destroying germs. The pink counter-act Ichthyophtherius; the blue kills Pathogenic germs. 15c each, 2 for 25c.

Aquarium Grit. Fine, white, silicon sand or fine gravel, thoroughly washed, for growing oxygenating plants. 10 pound bag for 12 gal. aquarium, 50c; 25 pound bag for aquariums up to 30 gal., \$1.00.

Aquarium Cement. Our own superior brand. Powder and oil to be mixed as needed. Quart carton, \$1 each; \$2.50 for 3.

Aquarium Cleaners. Blade holder mounted on long extension handles for reaching any part of the glass. 50c each.

Glass Rod Breeding Cages for Tropicals, 5x4x3 in. \$2.

Dip Tubes for removing sediment. 50 cents.

Feeding Rings. 15 cents each; \$1.25 doz.

Nets. For handling fish. 6 in. for goldfish, 75c; 3 in. for tropicals, 25c.

Floating Thermometers. 75 cents.

Extension Sockets and clips for heating bulbs. 50c.

REMEDIES

We have made a special study of the maladies of aquarium fishes and shall be glad to give you the benefit of our experience. If interested ask for our folder describing symptoms and methods of curing. The four chemicals listed below should be kept on hand at all times.

TURK'S ISLAND SEA SALT. 35c per pint carton; 50c per quart.

GERMAN FUNGUS CURE. An antiseptic tonic and healing preparation for all fish diseases. Box, 25c; lb., \$1.

PERMANGANATE CRYSTALS. 50c per bottle.

ICHTHYOPHTHERIUS REMEDY. 50c per bottle.



Veiltail Siamese Fighting Fish (Betta Combidia)



WILLIAM TRICKER, INC.
SADDLE RIVER, N.J. INDEPENDENCE, O.

Permit No. 1
Ohio
Independence,
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U. S. POSTAGE
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Section 435 1/2

Tricker's Collections of ORNAMENTAL FISHES—

THESE collections are specially arranged to provide selections of ornamental fishes especially suited to the different sizes of the new Tricker Aquariums. On page 1, the new De Luxe Aquarium is illustrated in color. This aquarium with any of these collections makes an ideal combination sure to delight the young folks and grown-ups alike. The fascination of the indoor aquarium is never-ending. Fishes are so easy to care for and provide so much entertainment and beauty they become more and more desirable all the time to those who keep them for pets.

HARMONY Collection No. 51

One pair of seven varieties of lively, brilliantly colored tropical fishes. The kind that get along so peaceably we call them the Harmony Collection. Usually includes Swordtails, Moons, Barbs, Danios, Flag Fish, Fundulus, Silver Tetra, Cheatodon. Just right for our No. 211 De Luxe Aquarium or No. 112 Eureka Aquarium.

7 pairs of fishes with shipping can. \$12



MIKADO Collection No. 30C

Five pairs of fancy goldfishes of the more unusual types. Will bring a bit of old Japan right to your home, for some of the types were developed and named by the Japanese. Collection includes 1 pair of young Japanese Veiltails, 1 pair of young Calico Veiltails, 1 pair of young Veiltail Moors, 1 pair of young Korean Fringetails and 1 pair of young Lionheads; also 1 oxygenating plant collection, No. 35B. A splendid selection for the Tricker De Luxe Aquarium No. 218.

5 pairs of fishes with plants and scavengers. A \$32.50 value. . . \$25

FieldStream Collection No. 45

Unusual and attractive hardy fishes that will stand cool temperatures. You may have hooked some of these on a fishing excursion. In the aquarium all are exceedingly interesting and attractive. 1 pair each of Chaetodons, Cardinal Fish, Pearl Roach, Black Bullheads, 2 Jap Snails, 2 Coral Snails, including shipping can. All for. **\$5.50**



WILLIAM TRICKER INC.

INDEPENDENCE, OHIO.

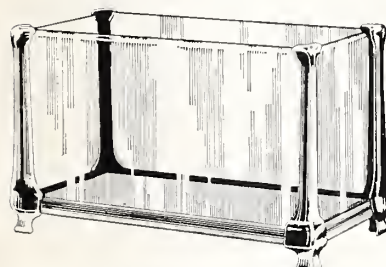


ORNAMENTAL AQUARIUMS—New Designs

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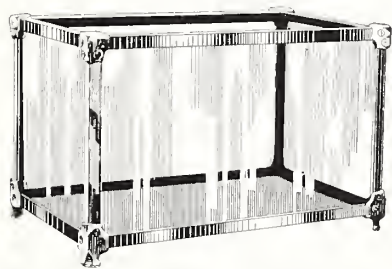
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finish to the aquarium. Four convenient sizes for either goldfishes or tropicals. See illustration in color on page 45.

No. 206—16x9x10—6 gal.	\$12.50
With plants and scavengers, \$1.50 more.	
No. 211—20x11x12—11 gal.	\$17.00
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No. 230 has reinforcing bars across top, and metal base bottom for additional strength.	



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No. 107—17 1/2 x 10 x 10—7 gal.	\$9.50
With plants and scavengers, \$1.75 more.	
No. 112—20 1/2 x 12 x 12—12 gal.	\$12.00
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10x6x7—1 1/2 gal.	\$1.50
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We quote prices on large aquariums or on special sizes upon request.

DEPENDABLE FISH FOODS AND REMEDIES

FOODS

These foods are prepared or tested in our laboratory by our chemist and have proven satisfactory for both young and mature fishes.

IN-NUR-CO. A prepared cereal and meat food that is a practical, balanced ration for goldfish. We make and use it ourselves. This type of fish food has become very popular. It is easy to use and is effective and satisfactory. Especially valuable in pools where plants and roots are scarce. Small tins, 25c; \$1 per lb.

THE O'BRIEN FISH FOOD. For tropicals and goldfishes. Contains vitamins and necessary elements for growth and health of fish. Small tins, 30c.

TONIC FISH FOOD. For fish in poor condition; accelerates growth of young and induces breeding. Small tins, 40c.

HYGIENE BABY FISH FOOD. A food specially prepared for young and growing fish. Small tins, 35c.

DRIED SHRIMP. An excellent concentrated food, consisting of the meat of the sea shrimp. An every day food for Goldfish or Tropicals. Small tins, 20c; \$1 per lb.

DRIED DAPHNIAE. Carcasses of the tiny crustaceans or water fleas that are the natural sustenance of all baby fishes. Essential in raising young Tropicals. 2 oz., 35c; \$2 pint; \$3.50 quart.

ENCHYTRAE WORMS. Small, thread-like worms that are the only practical living food for tropical fish the year around. The worms are easily raised in a mixture of leaf-mold and light soil by feeding with moist bread or boiled potatoes. Single portion, 60c; Double portion, \$1.

EARTH WORMS. A most satisfactory food for Cichlids and Goldfishes at spawning time. May be kept for a long time in moist soil if fed with bread or oatmeal, \$1 per portion.

INFUSORIA. Buy a Walking fish and feed it raw meat. This produces the Paramecium type of infusoria preferred by newly hatched fishes.

REMEDIES

We have made a special study of the maladies of aquarium fishes and shall be glad to give you the benefit of our experience. If interested ask for our folder describing symptoms and methods of curing. The four chemicals listed below should be kept on hand at all times.

TURK'S ISLAND SEA SALT. A tonic beneficial for all minor ills. Use 2 tablespoons per gallon and leave fish in bath for several days. 35c per pint carton; 50c per quart.

GERMAN FUNGUS CURE. An antiseptic tonic and healing preparation for all fish diseases where the fins are frayed or the scales coated with scum or fungus growth. Fish may be left in the bath indefinitely without injury. Preventive treatment is always advisable after the trip in the shipping can. Box, 25c; lb., \$1.

PERMANGANATE CRYSTALS. An active disinfectant and deodorant. Use in solution, tinting water a faint pink color, repeating when color disappears. Destroys Algae in the pool in several treatments. Avoid excess. 50c per bottle.

ICHTHYOPHTHERIUS REMEDY. Two drops per gallon will destroy the "Ich" parasites in five days without injuring the plants or fish. Advisable to increase the temperature to 85 or 90 degrees for tropicals. 50c per bottle.

THE O'BRIEN TESTER. For control of alkalinity in aquarium or in pool water. Indicator solution and acid for neutralizing. Set, \$3.



THE
INDEPENDENCE TRIO

This collection will give you 24 hours
of beautiful blossoms every day.

Rubra Rosea. Deep red; night blooming.

Juno. An Egyptian white; night blooming.

August Koch. Pleasing blue; day blooming.

Collection price **\$5**